MIDDLE TENNESSEE STATE UNIVERSITY

2021-2022 Graduate Catalog • Murfreesboro, Tennessee

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Founded in 1911, Middle Tennessee State University was the oldest and largest member of the Tennessee Board of Regents system until it was granted its own governing board in 2017. It is the number one choice of Tennessee's transfer students and adult learners and the number one producer of undergraduate degrees in the Greater Nashville region.

Middle Tennessee State University is an AA/EEO employer and does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Executive Director of Institutional Equity and Compliance, 1301 E. Main Street, CAB 220, Murfreesboro, TN 37132, (615) 898-2185. Additionally, the MTSU Title IX Coordinator, designated to monitor and oversee Title IX complaints, may be contacted at: Sam Ingram Building, 2269 Middle Tennessee Blvd., Murfreesboro, TN 37132, (615) 898-5133 or via www.mtsu.edu/titleix/.

The catalog is only available online and is updated yearly in the summer for the next academic year. It is compiled and prepared by the curriculum specialist, Office of the University Provost. If you have questions or need assistance, please contact the curriculum specialist at (615) 904-8210.

Homepage image provided by MTSU Creative and Visual Services.

About MTSU

Middle Tennessee State University, a coeducational, tax-supported institution founded in 1911, is located in Murfreesboro less than a mile from the exact geographic center of the state. Murfreesboro, a historic city of over 140,000, is 32 miles southeast of Nashville via I-24 and is easily accessible from any direction. MTSU students and personnel can enjoy the advantages of a metropolitan atmosphere without the impersonalization associated with a big city.

The large and beautifully landscaped campus of approximately 500 acres has more than 200 permanent buildings totaling almost 6.0 million square feet. Visitors may take a virtual tour at tour.mtsu.edu/ or schedule a visit at mtsu.edu/schedule-a-visit/index.php.

The University is made up of eight undergraduate colleges--the College of Basic and Applied Sciences, the College of Behavioral and Health Sciences, the Jennings A. Jones College of Business, the College of Education, the College of Liberal Arts, the College of Media and Entertainment, the University College, and the University Honors College--and a College of Graduate Studies. MTSU offers curricular breadth in a variety of programs ranging from traditional ones on which the school was founded to new, innovative ones designed for a rapidly changing society. Designated a regional university, MTSU provides services and continuing education to the central Tennessee area.

Some 83 percent of the school's 955 full-time faculty members hold terminal degrees. The student body numbers 22,080 and comes from 95 Tennessee counties, 46 states, and 67 foreign countries.

Statement of Mission

Middle Tennessee State University, a comprehensive, innovative institution, attracts students to distinctive bachelor's, master's, specialists, and doctoral programs that prepare graduates to thrive in their chosen professions and a changing global society. Students and faculty generate, preserve, and disseminate knowledge and collaboratively promote excellence through teaching and learning, research, creative activity, and public engagement.

Approved March 31, 2020, by the MTSU Board of Trustees.

Purpose

To fulfill its mission, Middle Tennessee State University

- fosters a student-centered environment conducive to lifelong learning, personal development, and success;
- educates and challenges students through a broad array of high-quality, affordable academic programs grounded in a common core of arts and sciences;
- enhances access through unique programs, distance learning, and advising to meet the needs of a diverse student population;
- supports student learning through effective teaching methods, emerging technologies, experiential and integrative learning, research, and co-curricular and extracurricular activities;
- attracts and retains exceptional faculty and staff and develops resources to support excellence in instruction, research, creative activity, and public and professional service;
- develops and sustains academic partnerships, entrepreneurial activities, and public service to support instruction, research, and communities throughout the region;
- promotes ongoing engagement with its alumni, partners, and friends; and
- serves as an emerging center for international study, understanding, and exchange.

Middle Tennessee State University educates students to

- think logically, critically, and creatively;
- make sound judgments with an awareness of ethical, moral, and aesthetic values;
- acquire a working knowledge of a discipline or a group of related disciplines;
- examine, analyze, and shape the rapidly changing world through scientific knowledge, creative undertakings, and an understanding of culture and history;
- communicate clearly and precisely and understand the proper role of free expression and civic engagement in our society; and
- demonstrate the effective and adaptive use of current and evolving technologies.

Vision

Middle Tennessee State University will be a vibrant hub for educating accomplished students who are civically engaged and globally responsible citizens; a seedbed for research and entrepreneurship; and an engine of cultural and economic development.

Community Standards

MTSU is committed to developing and nurturing a community devoted to learning, growth, and service. Each person who joins or affiliates with the community does so freely and accepts and practices the following core values and expectations:

- **Honesty and Integrity.** The notions of personal and academic honesty and integrity are central to the existence of the MTSU community. All members of the community will strive to achieve and maintain the highest standards of academic achievement in the classroom and personal and social responsibility on- and off-campus.
- **Respect for Diversity.** The MTSU community is composed of individuals representing different races, ethnicities, sexual orientations, cultures, and ways of thinking. We respect individual differences and unique perspectives and acknowledge our commonalities.
- **Engagement in the Community.** All members of the community are encouraged to participate in educationally purposeful activities that support and enhance the MTSU experience. Active involvement and personal investment in the classroom and throughout the community are hallmarks of an engaged citizen.
- **Commitment to Non-violence.** MTSU is committed to the principles of nonviolence and peaceful conflict resolution. Community members will freely express their ideas and resolve differences using reason and persuasion.

The History of the University

Middle Tennessee State University began as Middle Tennessee State Normal School, opening its doors on Monday, September 11, 1911.

In 1909, the Tennessee General Assembly passed legislation to improve the system of public education by establishing a General Education Fund and creating three normal schools, one in each of the three grand divisions of the state. These institutions were to establish teaching standards or "norms," hence the name. The Murfreesboro school began with four buildings on a dusty site that just a year earlier had been farmland.

Opening with a two-year program for training teachers, Middle Tennessee State Normal School evolved into a four-year teachers college in 1925 with the power of granting the Bachelor of Science degree. In 1943, the General Assembly designated the institution a state college. This new status marked a sharp departure from the founding purpose and opened the way for expanding curricular offerings and programs. In 1965, the institution advanced to university status.

Several significant milestones chart the progress from normal school to university and beyond. During the progressive movement from a two-year normal to a university, several significant milestones may be identified. Responding to the expressed needs of the institution's service area, the Graduate School was established in 1951. The Bachelor of Arts was added that same year. To effect better communications and improve administrative supervision, the schools concept was introduced in 1962.

As MTSU developed and grew, new degree programs included the Doctor of Arts in 1970 and the Specialist in Education in 1974. Library resources dramatically increased, and sophisticated computer services aided instruction and administration. A highly trained faculty enabled the University to continue growth in program offerings. In 1991, the University's six schools-five undergraduate and the graduate school-became colleges. In 1998, MTSU's Honors Program became the Honors College, the first in the state. In 2006, the Division of Continuing Studies and Public Service changed to the College of Continuing Education and Distance Learning. In 2002, approval was granted to redesignate three D.A. programs to Doctor of Philosophy programs, and subsequently five others have been approved. In the 2010 reorganization, Continuing Education and Distance Learning became the University College, and the College of Education and Behavioral Science became the College of Education and the College of Behavioral and Health Sciences. The Doctor of Education was approved in 2012.

Since 1911, MTSU has graduated more than 150,000 students. Despite the University's growth from a campus of 100 acres, 125 students, and a faculty of 18, to an academic city of over 500 acres, 22,000 students, and a faculty of 995, the institution is still essentially a "people's university" with a concern for the diverse needs of the area that it serves. In 1986, James McGill Buchanan ('40) became the first MTSU alumnus to be awarded the Nobel Prize. Buchanan received the Nobel Memorial Prize in Economic Sciences for his development of the theory of public choice, a way of studying the expenditure of public funds. In 2011 the University celebrated it's Centennial year with the theme "A Tradition of Excellence." As the University looks forward to the next 100 years, the theme is exemplified as everyone in the University community-students, faculty, staff, alumni, and friends-strives to be the best.

Accrediting Agencies and Memberships

Middle Tennessee State University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, specialist, and doctorate degrees. Questions about the accreditation of Middle Tennessee State University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

AACSB International - The Association to Advance Collegiate Schools of Business
ABET, Inc., Computing Accreditation Commission of ABET (http://www.abet.org)
ABET, Inc., Engineering Technology Accreditation Commission of ABET (http://www.abet.org)
Accreditation Council for Education in Nutrition and Dietetics (ACEND)
Accrediting Council on Education in Journalism and Mass Communication - ACEJMC
American Anthropological Association
American Association for State and Local History
American Association of Airport Executives
American Association of Colleges and Universities
American Association of Collegiate Registrars and Admissions Officers
American Association of Colleges for Teacher Education
American Association of Colleges of Nursing
American Association of Family and Consumer Sciences
American Association for Leisure and Recreation
American Association of State Colleges and Universities
American Chemical Society
American College Testing Program
American Council on Education
American Historical Association
American Library Association
American Political Science Association
American Simmental Association
American Society for Biochemistry and Molecular Biology
American Sociological Association
Association for Childhood Education International
Association for Continuing Higher Education
Association for Gerontology in Higher Education (AGHE)
Association for Infant Mental Health in Tennessee (AIMHiTN)
Association of Departments of Foreign Languages
Fuld Institute for Technology in Nursing Education
Institutional Animal Care and Use Committee Administrators Association
International Dyslexia Association
Learning Resources Network
NASFA - Association of International Educators (National Association of Foreign Student Advisors)
National Air Transportation Association
National Association of Fellowship Advisors (NAFA)
National Association for School Psychologists (NASP)
National Association for the Education of Young Children
National Association of Schools of Art and Design
National Association of Schools of Music
National Association of Schools of Theatre
National Association of State Universities and Land-Grant Colleges
National Association of Student Personnel Administrators
National Athletic Trainers' Association
National Business Aviation Association
National Collegiate Athletic Association
National Collegiate Honors Council
National Commission for Health Education Credentialing
National Council for Preservation Education
National Council for Public History
National Council of University Research Administrators
National Intercollegiate Flight Association
National League of Nurses
National Recreation and Parks Association
North American Colleges and Teachers of Agriculture
Online Learning Consortium
ORAU - Oak Ridge Associated Universities, Partnerships for Innovation
Physics Teacher Education Coalition
Society of American Archivists
Society of Health and Physical Educators
South Central Local Interagency Coordinating Council

Association of Technology, Management, and Applied Engineering (ATMAE)
Aviation Accreditation Board International
Aviation Technician Education Council
Broadcast Education Association
Certified Family Life Educator (CFLE)
CIM National Steering Committee
Coalition for Networked Information
Coalition of Adult Learning Focused Institution (ALFI)
Collaborative Institutional Training Initiative
Commission on Accreditation of Allied Health Education Programs
Commission on Accreditation of Athletic Training Education (CAATE)
Commission on Collegiate Nursing Education
Conference USA
Consortium for Overseas Student Teaching (COST)
Council for the Accreditation of Educator Preparation (CAEP)
Council for Accreditation of Counseling to Related Educational Programs (CACREP)
Council for Adult and Experiential Learning (CAEL)
Council for Exceptional Children, Division of Early Childhood
Council for Interior Design Accreditation (CIDA)
Council for the Advancement and Support of Education
Council of Graduate Schools
Council of Southern Graduate Schools
Council on Library and Information Resources
Council on Social Work Education
Council on Accreditation of Recreation, Parks, Tourism and Related Professions (COAPRT)
Council on Undergraduate Research
Southeastern Museums Conference
Southern Association for College Student Affairs
Southern Association of Collegiate Registrars and Admissions Officers
Southern Early Childhood Association (SECA)
SREB Council on Collegiate Education for Nursing
Southern Regional Honors Council
Teacher Education Council of State Colleges and Universities
Teachers College Association of Extension and Field Services
Tennessee Alliance for Continuing Higher Education
Tennessee Association of Colleges for Teacher Education
Tennessee Association of Collegiate Registrars and Admissions Officers
Tennessee Association of Museums
Tennessee Association of Science Department Chairs
Tennessee Association of Veterans Programs Administrators
Tennessee Commission on Children and Youth (TCCY)
Tennessee Conference of Graduate Schools
Tennessee College Association
Tennessee Collegiate Honors Council
Tennessee Department of Intellectual and Developmental Disabilities
Tennessee Early Intervention System
The College Board
The Tennessee Academy of Science
United States Army, Cadet Command
University Aviation Association
University Film and Video Association

Academic Calendar

The calendars listed below are subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state

The academic calendar can be found at **www.mtsu.edu/calendar_academic.php.** See **Academic Calendar** for a pdf version.

Important dates and deadlines for graduate students can be found at www.mtsu.edu/graduate/student/calendar.php. Application deadlines for particular graduate programs may be earlier than the general application deadline. Check individual programs for their deadlines.

Online schedule/registration guide for registration, fee payment, drop/add, and other important dates can be found at www.mtsu.edu/registration/registration-guide.php.

Final exam schedule can be found at www.mtsu.edu/registration/registration-guide.php.

In the event of inclement weather, MTSU will disseminate closing plans. See mtsunews.com/weather/ for more information.

College of Graduate Studies

The College of Graduate Studies provides academic and other support services while upholding academic standards. The college also serves as the central collegiate component for uniting the entire graduate academic community at Middle Tennessee State University. In consultation with the graduate faculty, the college establishes policies and procedures to promote excellence in graduate education. These include processes to ensure judicious and selective graduate student admission decisions, rigorous adherence to the academic standards expected of graduate students, monitoring for excellence in graduate program curricula through the graduate program review process, and selectivity in making graduate faculty appointments. The college certifies that every candidate for conferral of a graduate degree has fulfilled all academic requirements. The college contributes assistance to help ensure that each graduate program provides the optimal educational experiences for its graduate students. This support includes the distribution of graduate assistant funds and the provision of graduate fellowships and scholarships.

Mission

The College of Graduate Studies, in partnership with other academic units at Middle Tennessee State University, regional institutions of higher education, and private and public agencies and corporations, is committed to a leadership role in graduate education. This on-going process will result in the development of the technically skilled, entrepreneurial workforce required for sustaining regional, national, and global economies. This mission will be accomplished through seamless integration of teaching and learning, the outstanding scholarship of the University's faculty and students, continued emphasis on enhanced-quality programs, and development of innovative programs with an interdisciplinary focus.

The Graduate Council and Graduate Faculty

Graduate Council Mission Statement

The Graduate Council plays a crucial role in the oversight and planning of all MTSU graduate courses and graduate degree programs, in establishing criteria for the appointment and reappointment of graduate faculty, in assessing graduate student issues and concerns, and in recommending to the dean of the College of Graduate Studies University-wide policies and procedures for implementation. The Graduate Council advises in the modification of existing programs and in the approval and implementation of any new programs. All student activities leading to advanced degrees proceed under policies and regulations established and reviewed by academic programs, the Graduate Council, and the College of Graduate Studies.

The Graduate Council provides leadership in the pursuit of excellence in scholarly activity and serves as an advocate in obtaining resources for graduate programs. Only full-time MTSU faculty holding membership on the graduate faculty may serve on the Graduate Council. Council members are appointed by the president to serve three-year terms with three representatives per college. Two graduate student representatives who meet all graduate academic standards are also appointed. To ensure continuity and institutional memory in the creation and implementation of policies and procedures, one third of the council members rotate off each year and are replaced by six new faculty members representing each college. Graduate students are appointed to the council each academic year, and the graduate college dean and the six academic deans serve as ex officio members. The vice chair, who conducts meetings in the absence of the chair and who serves as chair-elect, is elected annually. The chair, in consultation with the dean of the College of Graduate Studies, is responsible for setting the council's agenda.

Graduate Faculty Membership

Only graduate faculty members are eligible to teach 5000/6000/7000-level courses and serve on thesis or dissertation committees. Full members are eligible to serve as thesis and dissertation committee chairs.

Full Membership

This category applies to tenure/tenure-track faculty. The period of appointment is five years and may be renewed in accordance with Graduate Council criteria. Full members may serve as chairs of thesis and dissertation committees. To be the chair of a dissertation committee, a faculty member must also have a doctorate degree in the discipline and must be teaching in a doctoral degree-granting department or be a part of an interdisciplinary doctoral program. Full membership indicates that the individual

- holds the terminal degree in the field(s);
- has experience teaching graduate courses;
- demonstrates a minimum level of research/creative work activities;
- has been recommended by the department chair, the college dean, and Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.

Teaching Membership

This category applies to tenure/tenure-track faculty. The period of appointment is five years and may be renewed in accordance with Graduate Council criteria. Teaching members may not direct a doctoral dissertation or a master's thesis but may serve as a committee member/reader. Teaching membership indicates that the individual

- holds the terminal degree in the field(s) or provides an approved Academic Preparation Certification (APC) indicating qualifications to teach at the graduate level;
- has relevant experience/activities in the field;
- has been recommended by the department chair, the college dean, and Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.

Those with Teaching membership may apply for Full membership when they meet the criteria.

Adjunct Membership

This category applies to tenure-track faulty who do not yet qualify for Full or Teaching membership, full-time faculty not on the tenure track, part-time adjunct faculty, and individuals who are not MTSU faculty members but have specific expertise pertinent to graduate programs. The period of appointment is three years and may be renewed in accordance with Graduate Council criteria. Adjunct members may not direct a doctoral dissertation or a master's thesis but may serve as a committee member/reader. Adjunct membership indicates that the individual

- holds the terminal degree in the field(s) or provides an approved Academic Preparation Certification (AP) indicating qualifications to teach at the graduate level;
- has provided evidence of qualifications to execute assignments successfully;
- has been recommended by the department chair, the college dean, and Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.

Graduate Faculty Listing

A complete listing of current graduate faculty members can be found at mtsu.edu/graduate/faculty/index.php.

Admission to the College of Graduate Studies

Individual Graduate Program Application Deadlines

For students to be guaranteed consideration for admission into a graduate program, applications must be complete by the deadline. Incomplete applications will be held until all required materials have been received. Individual programs determine if an applicant's file will be considered for review after the deadline. Applicants who wish to be considered for entry into a program for another term must submit a readmission application for the subsequent term. Submitted materials are retained for twelve months from the original submission.

Deadlines for application may differ for international and domestic students. Individual program deadlines may also differ from those of the College of Graduate Studies, so check individual programs for their deadlines. Refer to the deadlines both within and following the University Calendar for details. When there are two deadlines stated, the earlier deadline takes precedent for receipt of all application materials at the College of Graduate Studies.

General Admissions Policies

The University welcomes applications from individuals qualified for graduate study. Applications for admission should be completed online (www.mtsu.edu/graduate/apply.php) Upon receipt of all required materials, applications for degree-seeking students are forwarded to the individual program for consideration. In accepting admission to the College of Graduate Studies, a graduate student assumes responsibility for knowing and complying with the regulations and procedures set forth in this catalog as well as any amendments or revisions that may ensue.

Graduate applicants must have earned a bachelor's degree from an accredited institution and for some programs a master's degree from an accredited institution is also required for admission. Under certain conditions undergraduate students with 90 semester hours of credit and ABM admits may be eligible to take graduate coursework. (See the sections on **Undergraduate Student Eligibility to Enroll in Graduate Courses** and **Accelerated Bachelors to Masters [ABM] Pathways** below.)

Applicants admitted to graduate programs as **degree-seeking students** are those working toward a graduate degree. Degree-seeking students must be recommended for admission by the graduate program/department and approved by the dean of the College of Graduate Studies.

Students not seeking a degree are classified as **non-degree-seeking students** and are not admitted into a specific program. Non-degree-seeking students may take classes not restricted to students admitted into specific programs. Non-degree-seeking students are not permitted to enroll in graduate courses in the Jennings A. Jones College of Business. Non-degree-seeking students may take courses for a reasonable period of time as determined by the dean of the College of Graduate Studies and are not eligible for financial aid.

Students interested in obtaining a teaching license or working on master's +30 hours should apply for admission to either the Initial Licensing Track or the Master's +30 Track.

All applicants to the College of Graduate Studies must have an overall undergraduate grade point average (GPA) of 2.75 (on a 4.00 scale) to be considered for unconditional admission. (Also see conditional admission.) Applicants who attended graduate school at another institution must have a minimum cumulative GPA of 3.00 on all graduate work and a minimum of 2.75 on all undergraduate work to be considered for unconditional admission. International students on an F1 visa must meet requirements for admission.

Individual programs may have higher admission requirements than those of the College of Graduate Studies. Applicants should consult the program sections of the catalog for individual program admission requirements.

The College of Graduate Studies notifies all students of formal admission to individual graduate programs. Students pursuing a graduate degree must be fully admitted to the program prior their initial semester of coursework.

Misrepresentation of Academic Credentials

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to gain admission to MTSU, represents orally or in writing that such person has

1. successfully completed the required work and has been awarded one or more degrees or diplomas from an accredited institution of higher education;

2. successfully completed the required coursework and has been awarded one or more degrees or diplomas from a particular institution of higher education; or
3. successfully completed the required coursework for and has been awarded one or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

Any applicant who misrepresents his or her credentials will be subject to disciplinary action from the University which may include dismissal from the University.

Admission as a Degree-Seeking Student

All applicants wishing to pursue a graduate degree at MTSU must formally apply for admission to the College of Graduate Studies as degree-seeking students.

All degree-seeking applicants should submit their materials to the College of Graduate Studies by the deadline for guaranteed consideration. (Some programs have earlier deadlines than that for general admission.) Please see individual program listings and/or contact the program director for further information. Domestic applicants wishing to be admitted to a graduate program should take note of the following:

1. Submit an online application for admission at (www.mtsu.edu/graduate/apply.php).
2. Pay a nonrefundable application and processing fee (required of all applicants) and a part of the online application.
3. Order official transcripts certifying coursework from each college or university attended. Official transcripts must be mailed or emailed directly (or through an established clearinghouse) from the institution to MTSU and must be received prior to enrollment.
    a. If the applicant obtained or is obtaining the bachelor's degree at MTSU, only transcripts of undergraduate work not completed at MTSU are required. This includes all undergraduate courses taken as transfer credits and applied to a degree as well as those not applied to a degree.
    b. If the applicant obtained the bachelor's degree at another institution, that transcript is required. Transcripts of undergraduate work not completed at that institution are also required. This includes all undergraduate courses taken as transfer credits and applied to a degree as well as those not applied to a degree.
    c. If the applicant earned a graduate degree at another institution, that transcript is also required. Transcripts of all post-baccalaureate work not completed at MTSU are also required.
    d. Applicants whose degrees are from a university outside the United States are required to have their credentials evaluated by an acceptable evaluation service. All acceptable evaluation services are listed at www.naces.org/members.htm. A course-by-course report is required.
    e. Transcripts should be sent electronically to askgrad@mtsu.edu or, if necessary, mailed to College of Graduate Studies, MTSU Box 42, Murfreesboro, TN 37132.
4. Provide letters of recommendation, supplemental applications, official test scores, resumes, portfolios, and other items as required by the graduate program. Refer to the relevant graduate program information section of this catalog to determine if additional application materials are required.
5. Upon notification of admission by the College of Graduate Studies to a specific graduate program, the admitted student should contact the graduate program director for information on any required prerequisite courses.
6. An applicant not meeting University or program requirements for admission as a degree-seeking student may appeal to the individual program for special consideration. If recommended for admission by the program, the dean of the College of Graduate Studies has final approval or denial authority.
7. If an applicant fails to meet the deadline for submitting all materials for admission, it will be necessary for the applicant to reapply for admission. All materials submitted will be retained for one year from the date of submission. Students pursuing a graduate degree must be fully admitted to the program prior to their initial semester of coursework.

Admission as a Non-Degree-Seeking Student

Non-degree-seeking student admission is available to qualified applicants who wish to enhance their post-baccalaureate education but do not seek a graduate degree. International students on an F1 visa may not be admitted to graduate study as non-degree-seeking students. Non-degree-seeking students are not eligible for

financial aid. Applicants wishing to be admitted as non-degree-seeking graduate students should take note of the following:

1. Submit an online application for admission (www.mtsu.edu/graduate/apply.php).
2. Pay a non-refundable application and processing fee (required of all applicants and a part of the online application.
3. Order official transcripts certifying coursework from each college or university attended. Official transcripts must be mailed or emailed directly (or through an established clearinghouse) from the institution to MTSU and must be received prior to enrollment.
    a. If the applicant obtained or is obtaining the bachelor's degree at MTSU, only transcripts of undergraduate work not completed at MTSU are required. This includes all undergraduate courses taken as transfer credits and applied to a degree as well as those not applied to a degree.
    b. If the applicant obtained the bachelor's degree at another institution, that transcript is required. Transcripts of undergraduate work not completed at that institution are also are required. This includes all undergraduate courses taken as transfer credits and applied to a degree as well as those not applied to a degree.
    c. If the applicant earned a graduate degree at another institution, that transcript is also required. Transcripts of all post-baccalaureate work not completed at MTSU are also required.
    d. Any domestic applicant whose degree is from a university outside the United States is required to have their credentials evaluated by an acceptable evaluation service. All acceptable evaluation services are listed at www.naces.org/members.htm. A course-by-course report is required.

   Transcripts should be sent electronically to askgrad@mtsu.edu or, if necessary, mailed to College of Graduate Studies, MTSU Box 42, Murfreesboro, TN 37132.
4. Not all courses offered at the University are available for non-degree-seeking students. Non-degree-seeking students are not permitted to enroll in graduate courses in the Jennings A. Jones College of Business. Enrollment in specific courses may be limited to degree-seeking students only. Information concerning eligibility for specific graduate courses may be obtained from individual departments. It is advisable to speak with a graduate program director before enrolling in any graduate course.

   Non-degree-seeking students who wish to change to degree-seeking status must meet College of Graduate Studies' admission requirements and specific graduate program admission requirements to be eligible for consideration.
5. If transfer to a degree-seeking program is approved, appropriate semester hours earned while a non-degree-seeking student may be applied toward a degree program if approved by the graduate program director and the dean of the College of Graduate Studies. In general, applicants may not apply more than 6 credit hours taken while in non-degree-seeking status toward any degree program.
6. Only students seeking an Education Specialist or Doctoral degree or the College and University Teaching Certificate may enroll in 7000-level courses in the Department of Elementary and Special Education and Womack Educational Leadership Department. Non-degree/certificate-seeking students are not permitted to enroll in 7000-level courses.

Hours Before and After the Master's Degree for Teachers

Teachers may count graduate credit received toward the next pay raise, depending upon policies of their Local Education Agency (LEA). No credit will be given for repeated work. The student must follow all licensure processes regarding any additional endorsements earned and/or processes for initial licensure. If students are seeking endorsement or licensure they will need to work with the Office of Teacher Licensure in the MTSU College of Education to make sure all relevant and appropriate steps are completed for the MTSU College of Education to make such recommendations to the State Department of Education. The student is responsible for maintaining current knowledge of which graduate courses and hours are acceptable for licensure. Students pursuing graduate coursework for a pay raise in their school/district must work through their school/district to make sure the student has what is needed by their school district.

Undergraduate Student Eligibility to Enroll in Graduate Courses

Undergraduate students at MTSU with 90 semester hours of credit may be allowed to take up to 12 semester hours of graduate coursework. Undergraduate students wishing to take graduate courses must obtain permission from their

undergraduate advisor, the graduate program director, and the College of Graduate Studies by filling out the "Application for MTSU Undergraduate Students to Take Graduate Work" form at www.mtsu.edu/graduate/forms.php in "Forms for Current Students." Permission is not guaranteed. Not all graduate courses are offered to undergraduate students. If courses are taken for graduate credit while an undergraduate, they may be applied toward a graduate degree at the discretion of the individual graduate program if the earned credit is not used toward the granting of another degree. Alternatively, up to 12 hours of graduate courses may be applied toward the undergraduate degree. An undergraduate substitution form must be completed and processed by the student's home college in order for the student to receive undergraduate credit. Undergraduates admitted to an approved Accelerated Bachelor's/Master's (ABM) pathway are permitted to apply a limited number of graduate courses taken while an undergraduate to both their undergraduate degree as well as to their future master's degree program.

Accelerated Bachelor's to Master's (ABM) Pathways

High achieving undergraduate students enrolled in select majors and intending to pursue a master's degree in certain programs may apply to participate in the Accelerated Bachelors/Masters (ABM) pathway. The pathway allows undergraduate students an opportunity to complete select requirements for both the bachelor's and master's degrees simultaneously.

To qualify for admittance to an ABM pathway, undergraduate students must have at least a 3.25 inclusive GPA and have completed at least 75 undergraduate credit hours. They must have a minimum of two semesters remaining at MTSU. Individual ABM pathways may have additional admission requirements (see individual programs). In order to apply, contact the ABM coordinator for the pathway. Once admitted to the pathway, students must complete an ABM contract which can be found on the College of Graduate Studies website (mtsu.edu/graduate/forms.php).

A student may withdraw from an ABM pathway at any time by informing the ABM pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not re-enter the same ABM pathway.

Students will be dismissed from an ABM pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM pathway guidelines and specific program requirements;
2. failure to maintain an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

A student who either withdraws or is removed from an ABM pathway may apply to the College of Graduate Studies for admission to a graduate program, but will do so as a typical applicant and provide all application materials required of other non-ABM pathway students. Such students may still count the graduate credit they earn toward the completion of their undergraduate requirements, but may only use these courses toward their graduate degree requirements with the approval of the graduate program coordinator, provided the minimum grade was met.

A grade of B or higher is required for all graduate courses that satisfy ABM pathway requirements.

Some majors may have an ABM pathway for a specific concentration within a master's degree program. If an ABM pathway student changes into a concentration outside the pathway, the student must make up the graduate hours needed to meet the minimum credit hours requirement for the graduate program concentration selected. In this case, the graduate hours taken as an undergraduate then only count towards the undergraduate degree, and more hours are needed at the graduate level.

Upon successful completion of the ABM Pathway, students must submit an application (including application fee) to the College of Graduate Studies. Additional application requirements will be waived, and the student will be admitted to the program automatically. Upon acceptance to the MTSU graduate program, students will be considered graduate students and will pay graduate tuition for all remaining graduate courses.

ABM Pathways currently accepting applicants:

- M.B.A. Business Administration (B.B.A., Business Administration; B.B.A., Management)
- M.F.A. Recording Arts and Technologies (B.S., Audio Production)
- M.S. Management (B.B.A., Management)

Auditing Courses

A student who chooses to audit a course is one who enrolls and participates in a course without expecting to receive academic credit. The same registration procedure is followed and the same fees charged as for courses taken for credit. An audited course is not applicable to any degree or certificate.

Regular class attendance is expected of an auditor. Students interested in auditing a course should discuss course requirements with the instructor prior to enrolling. Failure to meet course requirements may result in an auditor being removed from the course at the request of the instructor. A successful audit will be recorded on the transcript with the designation NC. Any petition to change from audit to credit or credit to audit must be processed by the last day in the semester in which a class may be added to the student's schedule of classes. Requests to change from credit to audit after the deadlines must be approved by the dean of the College of Graduate Studies.

Admission of MTSU Faculty Members and/or Administrators

Members of the faculty and/or administration of MTSU are eligible for admission to the College of Graduate Studies just as any other applicant. They may not take over 6 semester hours of coursework during any semester. Faculty at the rank of assistant professor or higher or administrators of equivalent ranks may not be admitted to any doctoral program. If instructors who are in a doctoral program are appointed to assistant professor rank, they must discontinue the doctoral program.

Readmission (Reenrollment)

A previously enrolled student may reapply online on the College of Graduate Studies website (www.mtsu.edu/graduate/apply.php). A readmission application is required from any student who missed one or more semesters (excluding summers), regardless of the reason. For non-degree-seeking post-baccalaureate students, readmission is granted at the discretion of the graduate dean and is subject to space limitations with degree-seeking students given preference for enrollment.

For degree-seeking students, each graduate program may have a specific readmission policy and should be contacted for information. Readmission requires the recommendation of the graduate program and approval by the dean of the College of Graduate Studies. Some graduate programs regularly allow readmission for individuals who have missed no more than one semester or if the "stop-out" period is less than one year; others are more restrictive due to program capacity, curriculum, and ongoing quality improvement. Students seeking to be readmitted must meet the requirements of new applicants.

International Graduate Admissions

The Office of International Graduate Admissions under International Affairs (IA) will process all information regarding application to the University and immigration status. The University provides immigration advisement through Designated School Officials (DSOs) located within IA. The DSOs are responsible for issuing I-20 and DS-2019 documents used for applying for F and J visas. They serve as liaisons among faculty members, administrators, and international students. To expedite the processing of your file, please review the information listed below and the information found at www.mtsu.edu/graduate/international.

All applicants wishing to pursue a graduate degree at MTSU must formally apply for admission to the College of Graduate Studies as degree-seeking students. An applicant applies to the College of Graduate Studies, and the complete application is forwarded to the individual program for consideration upon receipt of all application materials. The College of Graduate Studies is responsible for the admission of all graduate students to the University. International applicants must meet the admission standards for the College of Graduate Studies and be admitted to an individual graduate program. All inquiries and correspondence regarding admission should be addressed internationalgrad@mtsu.edu. Application information including forms, requirements, and instructions may be obtained by contacting the college or at www.mtsu.edu/graduate.

International applicants with degrees from outside the United States are required to have their transcript(s) evaluated by an acceptable evaluation service (for acceptable services, see www.naces.org/members). Applicants residing outside the United States at the time of application can apply for admission for the Fall and Spring semesters only. Applicants who are already in the United States and in F1 or J1 status may also apply for Summer, depending on the availability of summer courses in the graduate program.

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to gain admission to MTSU, represents orally or in writing that such person has

1. successfully completed the required work and has been awarded one or more degrees or diplomas from an accredited institution of higher education;
2. successfully completed the required coursework and has been awarded one or more degrees or diplomas from a particular institution of higher education; or
3. successfully completed the required coursework for and has been awarded one or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

Any applicant who misrepresents his or her credentials will be subject to disciplinary action from the University which may include dismissal from the University.

All international applicants should submit their materials to the College of Graduate Studies by the deadline for guaranteed consideration. Some programs have earlier deadlines than that for general admission. Please see individual program listings and/or contact the program director for further information. International applicants wishing to be admitted to a graduate program should take note of the following:

1. Submit an online application for admission (www.mtsu.edu/graduate/apply.php).
2. Pay $35 nonrefundable application fee (money order or check with routing numbers); American Express, Visa, and MasterCard are accepted for online applications.
3. Provide a copy of valid passport.
4. Order a course-by-course evaluation of transcript(s) from institutions outside the United States by an acceptable evaluation service. All acceptable evaluation services are listed at www.naces.org/members. **Evaluations should be sent electronically to internationalgrad@mtsu.edu or, if necessary, mailed to College of Graduate Studies, MTSU Box 42, Murfreesboro, TN 37132.**
5. Order official transcripts certifying coursework from each United States college or university attended with the exception of MTSU. Official transcripts must be mailed or emailed directly (or through an established clearinghouse) from the institution to MTSU and must be received prior to enrollment. **U.S. Transcripts should be sent electronically to askgrad@mtsu.edu or, if necessary, mailed to College of Graduate Studies, MTSU Box 42, Murfreesboro, TN 37132.**
6. Provide contact details for recommenders, supplemental applications, official test scores, resumes, portfolios, and other items as required by the graduate program and submit to the College of Graduate Studies through the Graduate Portal. Please refer to the relevant graduate program information section of this catalog to determine if additional application materials are required.

7. International students who will be attending the University on a visa and who are not native speakers of English or graduates of undergraduate or graduate institutions in the United States must submit a Test of English as a Foreign Language score (TOEFL; www.ets.org/toefl; minimum score of 71 Internet-based), International English Language Testing System score (IELTS; www.ielts.org; minimum score of 6.0), International Test of English Proficiency score (iTEP; www.itepexam.com; minimum score of 4.5), E.L.S. instruction (www.els.edu; completion of level 112), as a demonstration of English proficiency in order to be admitted to graduate studies at MTSU. Note that certain programs may require higher standards, so please consult the program coordinator for more information.
8. International applicants on F and J visas must provide verification of financial support prior to admission as required by the United States Immigration and Naturalization Service. An affidavit of support is not required for admission; however, international students (F1) requiring issuance of Form I-20 must supply sufficient evidence of financial support for the applicant and all members of their family requiring issuance of dependent Form I-20. Further information may be obtained from the Office of International Affairs at mtsu.edu/intered/grad_students.php.
9. Undocumented aliens may be admitted to MTSU as out-of-state students and are not eligible for federal financial aid.
10. Upon notification of admission by the College of Graduate Studies to a specific graduate program, the admitted student should contact the graduate program director for information on any required prerequisite courses.
11. An applicant not meeting University or program requirements for admission as a degree-seeking student may appeal to the individual program for special consideration. If recommended for admission by the program, the dean of the College of Graduate Studies has final approval or denial authority.
12. Based on time requirements to obtain the necessary documentation, international applicants are encouraged to apply four months or more before the beginning of classes. Some programs have earlier application deadlines. See individual program pages for these dates.
13. If an applicant fails to meet the deadline for submitting all materials for admission, it will be necessary for the applicant to reapply for admission. All materials submitted will be retained for one year from the date of submission. Students pursuing a graduate degree must be fully admitted to the program prior to their initial semester of coursework.

Health and Accident Insurance

All international students with F1 or J1 status must obtain and present evidence of comprehensive health and accident insurance as a condition of admission and continued enrollment at MTSU. International students are required to purchase insurance through MTSU's designated provider shortly before matriculation. The only exception is for students who have insurance through their home country's sponsorship.

Immigration

It is the student's responsibility to see that they possess legal immigration status. All immigration documents should be kept in a safe place. According to U.S. Citizenship and Immigration Services (USCIS), F1 and J1 students must be enrolled full time (minimum 9 hours) during Fall and Spring semesters. Summer enrollment is optional, unless it is the first term of enrollment or the last term of a student's degree program. Also, USCIS requires that F1 and J1 applicants meet all admission requirements prior to the first date of enrollment. No conditional enrollment is possible.

Orientation Information

All F1 students must attend an Immigration Orientation which is held shortly before the beginning of classes each Fall and Spring. Information regarding orientation requirements is sent once the student has received final acceptance into the University and program of study. Any F1 students admitted for the summer term will be required to complete orientation requirements as instructed.

Residency Classification for Fee-Paying Purposes

The College of Graduate Studies determines residency for international students. All international students will be considered out-of-state for fee-paying purposes until they apply for and receive in-state status. Those who believe they meet the in-state criteria may fill out the "Request for In-State Tuition for International Students" form at mtsu.edu/graduate/forms.php. The completed form and supporting documentation should be submitted at minimum one month prior to the start of the term. Failure to file for residency may result in student payment of out-of-state tuition. Students will be informed of the residency decision by e-mail. Students holding F or J visas do not qualify for in-state classification.

Registration

Residency Classification for Fee-paying and Admission Purposes

The Graduate Office is charged with the determination of a graduate student's residency for fee-paying purposes. The Office of International Affairs determines residency for international students. Classification is determined by information submitted on the admission application. All decisions are based on regulations with the intent that all Tennessee public institutions of higher education apply uniform classification rules. Should a student be denied in-state classification, the student has the right of appeal by filling out the "Request In-State Classification" form at mtsu.edu/graduate/forms.php.

Veterans shall not be required to pay out-of-state tuition or any out-of-state fees, if the veteran

1. is eligible for Post-9/11 GI bill® benefits or Montgomery GI Bill® benefits; and
2. enrolls in a public institution of higher education, after satisfying all admission requirements, within three (3) years after the date of discharge as reflected on the veteran's certificate of release or discharge from active duty, Form DD-214, or an equivalent document.

To continue to qualify for in-state tuition and fees, the veteran shall

1. maintain continuous enrollment; and
2. provide two of the following within three (3) years from the first date of enrollment:
    a. Tennessee driver's license
    b. Tennessee motor vehicle registration
    c. Tennessee voter's registration
    d. Proof of established employment in Tennessee. Other documentation clearly evidencing domicile or residence in Tennessee as determined by the Tennessee Higher Education Commission.

Veterans should contact the Daniels Center at (615) 904-8347, KUC 124, with any questions.

Eligibility Verification for Entitlements Act (EVEA)

The Tennessee Eligibility Verification for Entitlements Act (EVEA) became effective October 1, 2012. The EVEA requires state public institutions of higher education to verify that persons seeking a "state public benefit" are either a "United States citizen" or "lawfully present" in the United States.

The term "state benefit" includes in-state tuition, lottery scholarship, academic scholarship, common market, or any other form of tuition assistance or waiver funded with state-appropriated dollars. State benefit does not include tuition assistance funded privately, such as a scholarship from the institution's foundation or a privately endowed scholarship.

Applicants do not have to verify the citizenship or lawful presence if not graduated from high school and are applying as dual enrollment, joint enrollment, or academically talented/gifted.

For additional information concerning EVEA and a list of eligible documents access www.mtsu.edu/evea.

Immunizations and Health Certificates

Hepatitis B and Meningococcal Meningitis Acknowledgment

The State of Tennessee mandates that each public or private postsecondary institution in the state provide information concerning hepatitis B and meningococcal meningitis to all students entering the institution for the first time. New students must acknowledge that they have read this information before they can register for classes. This information and acknowledgment statement are automatically displayed when new students register for classes on PipelineMT. If the student is under age 18, a parent or legal guardian is required to sign the form that is linked to the page and return it to Health Services before registration will be allowed.

All students under age 22 who are enrolling at MTSU for the first time regardless of the level at which the student is matriculating AND who will be living in on-campus housing, must show proof of adequate immunization against meningitis prior to assignment. "Adequate Immunization" means students must have been vaccinated on or after their 16th birthday. On move-in day, those students who have not previously provided such proof must provide it before they can be allowed to move in. For more information, access www.mtsu.edu/healthservices/immunizations.php.

Measles Immunization

Effective July 1, 1998, the State of Tennessee requires students entering colleges, universities, and technical institutes with enrollment of greater than 200 students to provide proof of two (2) doses of measles, mumps, and rubella (MMR) vaccine on or after the first birthday, or proof of immunity to measles if date of birth is 1957 or after. Students will not be allowed to register for full-time classes until an acceptable form is on file in the Student Health Services Office. More information can be obtained by contacting Student Health Services, 898-2988, or by visiting www.mtsu.edu/healthservices/Immunizations.php.

Varicella (Chickenpox) Immunization

Effective July 1, 2011, the State of Tennessee requires new full-time enrollees in higher education institutions with enrollments larger than 200 students to provide proof of two (2) doses of Varicella vaccine on or after the first birthday, history of chickenpox illness diagnosed by a healthcare provider or verified by a physician, advanced practice nurse or physician assistant to whom the illness is described, or proof of immunity to Varicella if date of birth is 1980 or after. Students will not be allowed to register full-time for classes until an acceptable form is on file in the Student Health Services Office. More information can be obtained by contacting Student Health Services, 898-2988, or by visiting www.mtsu.edu/healthservices/Immunizations.php.

Selective Service

All male U.S.citizens and male noncitizens who take up residency in the United States of American before their 28th birthday must register with Selective Service prior to registering for classes at MTSU. This requirement does not apply to veterans and others exempt by federal law.

Registration Process

The registration guide contains further information concerning registration procedures. The most current information regarding registration and availability of courses will be found online at www.mtsu.edu/registration/registration-guide.php.

Getting Started

To be accepted to the University, all students, including reenrollees and part-time students, must meet admission requirements. The University reserves the right to stop accepting applications and to terminate registration at any point to ensure enrollment limitations according to guidelines set forth by the institution.
MTSU offers priority registration for current, reenrolling, and new graduate students. Assigned registration times are accessible on PipelineMT and communicated via your MTMail account so check your email regularly.

- Students must resolve any registration holds before being eligible for registration. Students may access PipelineMT to view holds.
- Students must meet State of Tennessee immunization requirements (see above).

Advising

It is recommended for degree-seeking students to meet (in-person, online, via phone) with their program director or advisor before registering for classes for their first semester. This meeting will ensure that students fully understand requirements and begin their program by taking the correct courses. In many programs, departments must enter a permit into the system before a student is allowed to register for a particular course.

Registering Online for Courses

Click on PipelineMT at www.mtsu.edu; Choose Registration and Student Records (left menu). Choose from one of the following:

Registration

- Add or Drop Classes
- Look Up Classes
- Display Corequisites

Priority Registration Tools

- Assigned Advisor
- Assigned Registration Time
- Holds
- Maximum Registration Hours for Term
- Registration Status
- Schedule Planner

Safety Precautions

Certain courses and programs require the use and/or handling of hazardous materials or equipment. Students are expected to follow all safety instructions and to take the required safety precautions including, but not limited to, the use of personal protection equipment (PPE) during the course or program to prevent incidences of injury to self or other students

Fee Payment and Confirmation

For fee payment procedures and payment deadlines see Bursar's website at www.mtsu.edu/tuition. A student is not officially enrolled until completion of all of the requirements of registration including the payment of fees or confirmation of attendance.

How to pay registration fees by credit card or check card on PipelineMT:

- Log in to PipelineMT, click on Billing and Payment.
- Select Pay Registration, Balance, or Installment.
- Select Continue. You will be taken to the bill payment system.
- Select Make a Payment.
- Check Current account balance then click Continue.
- Click on the Select Payment Method drop down box then select Credit or Debit Card then click Select.
- Enter in credit/debit card number then click Continue.
- Enter in credit/debit card information then click Continue.
- Verify your information is correct then click Submit Payment.
- Wait for payment confirmation.

How to confirm registration on PipelineMT:

- Log in to PipelineMT, click on Billing and Payment.
- Select Confirm Registration.
- Select the term. Then click Submit. The account balance summary and account detail for the term will be displayed.
- Click "Yes, I will attend during ..." and wait for a confirmation number.

  Students will be given a confirmation number and should write down the confirmation number and date as proof of confirmation. If in doubt, students should try the process again and the system will tell them if registration has been confirmed. The confirmation number will not be repeated. If the student does not receive a confirmation number and is instead taken to the bill payment system, aid is either not on the account or a balance is still due.
- Class schedules will be deleted unless fees are paid or registration confirmed by the fee payment deadlines.
- Former students must settle all prior accounts in the Business Office and Walker Library before readmission.
- Students are required to have an ID card which is automatically validated each semester upon payment of fees.
- Students must register their automobiles for the current academic year.

Expenses/Tuition and Financial Aid/Assistantships and Fellowships

Expenses

The question of costs while attending the University is important to every student. It is difficult, however, to accurately estimate yearly expenditures; expenses vary according to the nature of the curriculum, the place of residence (whether in-state or out-of-state), and the student's own habits and needs. It is possible to live simply and to participate in the life of the student community on a modest budget. The best help the University can offer the student in budget planning is to provide available figures for expenses.

Health service and admission to athletic events are available to any currently enrolled student. The payment of the appropriate fees will permit any combination of graduate and undergraduate courses to be taken that may be required or approved. Charges for all coursework will be assessed by student level. The University reserves the right to correct errors in student fee assessments and charges which are discovered subsequent to initial billings and fee statements.

All fees are for the academic year and are subject to change by action of the Board of Trustees. The new fee amounts will be published each year when approved by the Board of Trustees (usually around July 1).

Registration Fees

Information on fees and deadlines can be found on the Bursar's website: www.mtsu.edu/tuition.

Late Registration

Students who complete registration (including the payment of fees) during the late registration period will be charged a $100 late fee.

Matriculation Fee for Incompletes

If a student receives a grade of Incomplete (I), he or she need not reregister or pay fees for the course every semester until the course is completed. Such students should work only with the course instructor to complete grade requirements.

Returned Checks

Acknowledged bank errors excepted, a $30 service charge will be assessed for each returned check (including web check payments). The University will decline to accept checks from any student who has checks returned by the bank more than once or if any check returned is not paid within ten (10) working days. A $100 late registration fee may be assessed for any returned check given in payment of registration fees and class schedule is subject to be deleted for nonpayment of fees.

Automobiles

All privately owned or operated vehicles for use on the campus must be registered annually with Parking and Transportation Services and must display an official registration permit. For more information or clarification, please refer to **Traffic and Parking Regulations,** available in the Parking and Transportation Services Office.

Auditing Charges

An auditor is one who enrolls and participates in a course without expectation of receiving academic credit. The same registration procedure is followed and the same fees charged as for courses taken for credit. An audited course is not applicable to any degree or certification program.

Persons 60 years of age or older or disabled persons suffering from a permanent total disability which totally incapacitates such persons from working at an occupation which results in an income (T.C.A., Section 49-7-113) who are domiciled in Tennessee may audit courses at any state-supported college or university without paying tuition

charges. (Note: The student must pay an application fee and special course fees.) Registration under this program is on a space-available basis; therefore, students cannot priority register. **Class selection should be processed no earlier than four weeks prior to the start of term or part-of-term (see Registration Guide for date of registration).** Students who priority register or receive a closed class override prior to the published registration date will be required to select another class. Proof of age or disability must be provided.

65-Year-Old/Disabled Credit Student

Persons 65 years of age or older or disabled persons suffering from a permanent total disability which totally incapacitates such persons from working at an occupation which results in an income (T.C.A., Section 49-7-113) who are domiciled in Tennessee may register for classes for credit by paying a service fee not to exceed $70 per semester. (Note: This fee includes maintenance fees, student activity fees, technology access fees, and registration fees; it does not preclude an application, late fee, change-of-course fee, parking fee, special course fee, etc.) Registration under this program is on a space-available basis; therefore, students cannot priority register. **Class selection should be processed no earlier than four weeks prior to the start of term or part-of-term (see Registration Guide for date of registration).** Students who priority register or receive a closed class override prior to the published registration date will be required to select another class. No late fee is charged. An application fee is required. In addition, the applicant must be eligible for admission and submit proof of age or disability.

Additional Charges

The University reserves the right to increase the charges listed herein or to add new ones whenever such increases or additions are found to be necessary.

Debts

An important part of every student's educational experience is learning to manage money and to responsibly discharge financial obligations incurred. With this in mind, MTSU expects students to promptly pay all University bills and accounts when due.

Failure to meet financial obligations will result in a student not being allowed to preregister, register, or receive transcripts, grade reports, or diplomas. In addition, any unpaid accounts are subject to be turned over to a collection agency which will adversely affect your credit rating.

Installment Payment Plan

Students who want to use the Installment Payment Plan must sign up for the payment plan and pay the down payment online via PipelineMT. If a student is eligible, there will be an option in the bill payment system to request a Installment Payment Plan. Students who wish to pay by mail must view the down payment amount online by selecting the option to view the payment plan installments. Students may also sign up for the plan and pay the down payment at the Business Office cashier windows.

Although all charges are due and payable in full at the beginning of each term, students in good financial standing at MTSU may defer payment of up to 75 percent of their registration, housing, and freshman meal plan fees for the Fall and Spring semesters. The Installment Payment Plan is not available for Summer terms or for students enrolled in the Winter session only.

To be eligible for the Installment Payment Plan, each participant must make a minimum down payment of 25 percent of the registration fees, residence hall rent, and freshman meal plan costs. The balance due must be $400 or more after all discounts, waivers, financial aid, and other credits are applied. A student who fails to make timely payments in a previous term will be denied the right to participate in the Installment Payment Plan in future enrollment periods. Any student who makes payment with a check which is subsequently returned will be denied participation in the Installment Payment Plan in all future terms.

The amount deferred will be payable in three monthly installments. For the Fall term, installment payments are due on or before **September 30, October 31**, and **November 30**. For the Spring term, installment payments are due on or before **February 28, March 31,** and **April 30**. The University is not obligated to send reminder notices before the payment is due. Participants in this plan must apply all discounts, waivers, credits, and financial aid (including student loans) toward payment of registration fees before a deferment will be considered. Financial aid and other credits received after the initial payment will be applied to the remaining balance, and future amounts due will be

recomputed. No refunds can be made until all fees are paid in full. Students will not be withdrawn for failure to pay the second, third, or fourth payments.
Each participant will be charged a $50 nonrefundable service fee each term to defray administrative costs. This fee is payable along with the 25 percent down payment on or before the registration fee payment deadline. An additional late payment charge of $25 will be assessed for each installment not paid on or before the due date and each 30-day period past the last installment up to a maximum of $100. Withdrawals from classes will not alter the remaining balance due except to the extent that any refund may be applied. Students who make payments with checks that are returned will be charged a $30 return check service fee as well as any applicable late fees.
If a payment is not received in the Business Office by the scheduled payment due date, the University will withhold all services from the student-including grades, transcripts, and future registration-until the fees have been paid in full including any assessed late fees.
All existing rules and policies pertaining to returned checks, refunds, withdrawals, dropped classes, and collection costs are applicable to the Installment Payment Plan.
Payment of the minimum amount due on the Installment Payment Plan finalizes registration. The class schedule will not be dropped. It is not necessary to also confirm on PipelineMT. The Installment Payment Plan service fee, late fee, and minimum amount are subject to change in future terms.
Additional fees for classes, dorms, or meal plans added after initial registration payment or confirmation must be paid by the late registration fee payment deadline. If students are eligible for the Installment Payment Plan, any unpaid fees after this date will be processed as a deferred payment. The $50 Installment Payment Plan service charge and any applicable $25 late payment fees will be charged.
Students who are not eligible for the payment plan will be subject to withdrawal from all classes or from the dorm for nonpayment or subject to service charges and late payment fees.
For more information and detailed instructions on how to sign up for the Installment Payment Plan, check online at www.mtsu.edu/tuition/payment-plan.php. Questions regarding the Installment Payment Plan should be directed to the MT One Stop at (615) 898-2111.

Deferred Payment for Recipients of Veterans Affairs or Other Governmentally Funded Educational Assistance Benefits

Service members, veterans, and dependents of veterans who are eligible beneficiaries of U.S. Department of Veterans Affairs educational benefits or other governmentally funded educational assistance, subject to the conditions and guidelines set forth in Tennessee Code Annotated 49-7-104 as amended, may elect, upon formal application, to defer payment of required tuition and fees until the student's monetary benefits have been received or until the final day of the term for which the deferment has been requested. Application for the deferment must be made no later than 14 days after the beginning of the term, and the amount of the deferment shall not exceed the total monetary benefits to be received for the term. Students who have been granted deferments are expected to make timely payments on their outstanding tuition and fees balance once educational benefits are being delivered, and eligibility for such deferment shall terminate if the student fails to abide by any applicable rule or regulation or to act in good faith in making timely payments. This notice is published pursuant to Public Chapter 279, Acts of 2003, effective July 1, 2003.

Veterans' Benefits and Transition Act of 2018

Effective August 1, 2019, the State-approving agency, or the Secretary when acting in the role of the State-approving agency, shall disapprove a course of education provided by an educational institution that has in effect a policy that is inconsistent with the areas below:

- Any covered individual is permitted to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website-eBenefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:
    - The date on which payment from VA is made to the institution.
    - 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

NOTE: ***A Covered Individual is any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill® benefits.***

- Educational institution will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

Veterans' Dependents' Post Secondary Education Assistance

Pursuant to T.C.A. § 49-7-102, certain statutory fee exceptions exist for dependents and spouses of military personnel killed, missing in action, or officially declared a prisoner of war while serving honorably as a member of the armed forces during a period of armed conflict. Contact the Daniels Center at (615) 904-8347, KUC 124, for more information.

Registration Confirmation

If fees are paid in full by financial aid, Federal Direct or PLUS loans, TELS (Lottery) scholarship, pre-paid tuition programs, Vocational or Veteran's rehabilitation or other credits, students must complete the registration process by confirming that they will attend MTSU for the term. If balance is a credit or zero, they must Confirm Registration on PipelineMT by the fee payment deadline.

To confirm registration, students should

- log in to PipelineMT at www.mtsu.edu;
- Select Confirm Registration;
- select the term. Then click Submit. The account balance summary and account detail for the term will be displayed.
- click "Yes, I will attend during ..." and wait for a confirmation number.

Students will be given a confirmation number and should write down the confirmation number and date as proof of confirmation. If in doubt, students should try the process again and the system will tell them if registration has been confirmed. The confirmation number will not be repeated. If the student does not receive a confirmation number and is instead taken to the bill payment system, aid is either not on the account or a balance is still due.

Please note: Reviewing the class schedule does not confirm registration; students MUST select the Confirm Registration option, then select the option "Yes, I attend during . . ." When this option is selected, **the student will be given a confirmation number if the registration is confirmed.** When a **confirmation number** is assigned, the system will hold classes. If registration is not confirmed before the fee payment deadline, the class schedule will be deleted from the computer. Financial aid refunds cannot be processed until confirmation is completed.

Check the online registration guide and www.mtsu.edu/tuition for detailed instructions, dates, and deadlines for each term.

All students who preregister and decide not to attend MTSU should access PipelineMT prior to the final fee payment date for the term to drop all classes from their records. If they decide not to attend MTSU after confirming, they must withdraw from the University.

Fee Adjustments

NOTE: ***No refund of housing, registration, or other fees will be made to students who are dismissed or suspended.***

Tuition, program services fees, and out-of-state tuition will be adjusted as follows:

1. Courses cancelled by the University will receive a 100% reversal of tuition and fees.
2. Students who preregister and drop classes or withdraw from all classes prior to the first day of class will receive a 100% reversal of tuition and fees. See the current online registration guide for fee adjustments and schedule adjustment dates.
3. A full (100%) reversal of tuition and fees will be provided in case of a student's death.
4. Tuition, registration fees, materials and course fees, residence hall rent, and meal plans will be adjusted at the rates of 75 percent or 25 percent to students who officially withdraw from the University prior to the dates specified in the registration guide published each semester. The same fee adjustment schedule applies to

students who drop below full-time to an hourly load. The calculation of tuition and fee adjustments for a complete withdrawal from the University is based on the percentage charge of all courses dropped for the term. There will only be an adjustment in fees if the new calculated charge is less than the original charge. Not all withdrawals will result in a refund or reduction in fees. The calculation of tuition and fee adjustments for dropped courses is based on the charge for currently enrolled hours plus a percentage charge of all courses dropped. There will only be a reduction in fees if the new calculated charge is less than the original charge. Not all dropped courses will result in a refund or reduction in fees.

Refunds due to fee adjustments will be processed beginning approximately two weeks after the end of each fee adjustment period. It takes several weeks to process all the refunds. The University will offset against proposed refunds any amount owed by the student to the University.

Drop/Withdrawal from class. Students who drop or withdraw from classes will have a balance due under the Installment Payment Plan. Fees are adjusted based on the drop or withdrawal date. The fee adjustment percentage is NOT applied to the amount of payment, but rather as a percentage adjustment of total fees. A refund would be issued to the student only if the newly adjusted amount of fees is less than the amount that has been paid by the student. Withdrawal from classes does not negate the student's responsibility to pay the balance of fees after the semester has begun.

Additional information on tuition and fee adjustments can be found on the Bursar's website: www.mtsu.edu/withdraw/fee-adjustment.php.

Refunds of Housing Expenses

Residence Halls

Applications for residence halls and on-campus apartments must be accompanied by the required prepayment as outlined in the license agreement. Prepayment is a security of good faith that denotes the applicant's serious intent to reside in on-campus housing. Prepayment fees are $350, $175 of which is applied toward Fall semester charges, and $175 of which is applied toward Spring semester charges. This prepayment is refundable prior to check-in according to the following schedule. All cancellations must be submitted in writing to the Housing and Residential Life Office. Prepayment amounts represent approximately 25 percent of the total semester fee and may vary from year to year. Students should contact Housing and Residential Life to verify specific changes.

Academic Year (Fall and Spring) Applications

Date of Cancellation	Refund Amount
By May 1	$175.00
By June 1	$100.00
By July 1	$ 50.00
After July 1, but prior to the first check-in day in August	$ 00.00

Spring Semester Only Applications

Date of Cancellation	Refund Amount
By October 15	$ 50.00
After October 15, but prior to the first check-in day in January	$ 00.00

Summer Housing

Details regarding application, fees, and refunds for summer assignment to residence halls and on-campus apartments may be obtained by contacting the Housing and Residential Life Office at (615) 898-2971.

Housing Fees

The refunds of residence hall fees after registration will be prorated on a weekly calendar basis when the student is forced to withdraw from the residence hall because of approved medical reasons confirmed in writing by a licensed physician.

Full refund will be made in the case of death. No refund will be made other than under the above conditions, except as specified in the Student Housing Agreement.

Direct Deposit of Financial Aid Credit Balance Refunds

Students receiving financial aid who expect to receive a refund must first be sure they have met all financial aid eligibility requirements, confirmed registration, have no holds, and completed all necessary paperwork.
All students must sign up for direct deposit online through PipelineMT. Online sign-up via e-Refund must be completed at least seven (7) days prior to the first day of classes to have the refunds available in accounts on the first day of classes.
Detailed instructions are available online at www.mtsu.edu/tuition/direct-deposit.php. It is critical that all information be entered correctly to avoid delay of refunds.
For students who choose not to sign up for direct deposit for financial aid refunds, a check will be mailed to the primary mailing address. Checks may not be available until the 14th day of the semester.

Financial Aid

The University offers financial aid assistance to eligible students through funding received from federal, state, institutional, foundation, and external sources. Generally, students must complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.gov each year to be considered for financial aid. The FAFSA School Code for MTSU is **003510**. For current information about financial aid, visit the MT One Stop website at www.mtsu.edu/one-stop.

Assistantships and Fellowships

A limited number of graduate assistantships and doctoral fellowships are available. An application form is available on the College of Graduate Studies website at www.mtsu.edu/graduate/forms.php. Filling out this form will inform a program of a student's desire to obtain an assistantship or fellowship. Students are encouraged to reach out to their program directors to discuss these opportunities as well. An individual is expected to be in good standing, i.e. having met the requirements for admission to a graduate program and having a cumulative GPA of at least 3.00 (3.25 for doctoral students) or more.
For international students serving as graduate teaching assistants, please note the following policy regarding the Required Competency in English, established pursuant to the Senate Joint Resolution 221 adopted by the 1984 General Assembly, the accreditation standards of the Southern Association of Colleges and Schools (4.4.1) and the Board of Trustees (Policy No. 301).
For individuals whose first language is not English, but are seeking to hold a graduate teaching assistantship, they must meet the minimum scores outlined in Policy which are

- a minimum score of 21 on the Speaking subscale of the iBT TOEFL for appointment where there is direct verbal interaction with students;
- a minimum score of 26 of the Speaking subscale of the iBT TOEFL for appointment where lectures are presented to the class or laboratory (a score of 25 may be assigned these duties on a probationary status for one semester);
- a minimum score of 6.5 on the Speaking subscale of the academic version of the IELTS test;
- a minimum score of 40 on the Test of Spoken English (TSE) of the Speaking Proficiency English Assessment Kit (SPEAK) for appointment where there is direct verbal interaction with students;
- a minimum score of 50 on the Test of Spoken English (TSE) of the Speaking Proficiency English Assessment Kit (SPEAK) for appointment where lectures are presented to the class or laboratory (a score of 45 may be assigned these duties on a probationary status for one semester).

Graduate Teaching Assistants (GTAs) assigned instructional duties on a probationary status must be observed by a member of the department and a faculty member from another department to establish that they are successful in the performance of their teaching duties. Written verification of agreement among the two observers that the GTA is sufficiently fluent in English must be submitted to the College of Graduate Studies before the GTA may be assigned teaching duties in a subsequent term.

Academic Policies and Procedures

Academic Advising

All incoming students should contact their program director before registering for their first semester of classes. This will ensure that students are enrolling in the correct courses and help them to understand their degree requirements and the audit of these in Degree Works. Courses must be accurately applied to degree requirements in Degree Works in order to qualify for financial aid, veterans benefits, and other programs.

Academic and Classroom Misconduct

1. The instructor has the primary responsibility for maintenance of academic integrity and controlling classroom behavior and can order the temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct that violates the general rules and regulations of the institution for each class session during which the conduct occurs. Extended or permanent exclusion from the classroom, beyond the session in which the conduct occurred, or further disciplinary action can be effected only through appropriate procedures of the institution. If an instructor wishes to remove a student from the classroom for a longer period of time or permanently, she/he must refer the student to the Office of Student Conduct.
2. Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students who are suspected of academic misconduct will be referred to the director of Academic Integrity. The academic misconduct process is described in MTSU Policy 312 Academic Misconduct. Courses may not be dropped pending the final resolution of an allegation of academic misconduct.
3. Students who accept responsibility for or are found responsible of academic misconduct, either directly or indirectly, through participation or assistance, will be assigned appropriate sanctions either by the director of Academic Integrity or by the Academic Misconduct Committee. In these instances, the faculty member has the authority to assign an appropriate grade for the exercise or examination, or to assign an "F" in the course, as is proportional to the nature and extent of academic misconduct. When assigning a grade based on academic misconduct, the faculty member shall ensure that the student is made aware of his/her appeal rights.
4. Disruptive behavior in the classroom may be defined as, but not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), text messaging, and the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, laptop computers, games, etc.).

This policy is promulgated pursuant to, and in compliance with, MTSU Policy 312 Academic Misconduct.

Academic Standing--Retention, Probation, and Suspension

Degree-seeking students are expected to take appropriate courses and make satisfactory progress toward their degree objectives as determined by the graduate program. A graduate student at the master's or specialist level must maintain a cumulative GPA of **at least 3.00** for all graduate work completed at MTSU as well as in the major. A doctoral student must maintain a minimum GPA of **at least 3.25.** Six semester hours of C grade (C+, C, or C-) coursework may be applied toward a master's or specialist degree (unless prohibited by the degree program - see individual programs for details); seven hours of C grade may count toward a Ph.D. No grade below C- may be applied toward a degree; however, all grades are included in calculation of cumulative GPA.
A graduate student failing to meet the applicable minimum cumulative graduate GPA retention standard will be placed on **academic probation** for the subsequent term. Probation in itself has no serious consequences other than to alert the student of potential academic problems and the requirement to (re)establish satisfactory academic status. Once on probation, a student has three consecutive semesters in which to restore the cumulative GPA to the minimum required. If the student fails to attain the required GPA at the close of the third semester of probation, the student will be suspended automatically.

A graduate student who is on academic probation, then returns to good standing will no longer be on probation. Should the student once again fall below the minimum cumulative graduate GPA for retention (GPA<3.00 for master's or <3.25 for doctoral) during their course of study, rather than being placed on probation again, they will be suspended.

In order to reenroll, a student must formally appeal the suspension to the graduate program by following established requirements within the program. In the event that a student is suspended and subsequently upon appeal is granted permission to reenroll, should the student fail to maintain the minimum cumulative GPA, there will be no second probationary period. The student will be terminated at the close of the semester and no longer eligible for matriculation in any program at MTSU.

Students whose appeals have been denied by their graduate programs will have the right to appeal this decision by notifying the dean of the College of Graduate Studies in writing by the first week of the term following their suspension. An ad hoc committee made up of members of the MTSU Graduate Council from other disciplines will be created. The student and program will have the opportunity to represent both the appeal and decision to the committee at this meeting. The decision of the committee is final.

In addition to students who are permanently suspended due to failure to return to good standing following a suspension, students may be removed from their programs due to an unsuccessful suspension appeal or for failure to make satisfactory academic progress.

In the case of failure to make satisfactory academic progress, the program may recommend dismissal to the College of Graduate Studies with clear documentation as to the reasons for recommendation. Action on this recommendation will be made by the dean of the College of Graduate Studies. Appeals of this dismissal would be made to the College of Graduate Studies and are considered by an Ad Hoc Graduate Council Suspension Appeals Committee. The action of this committee is final.

Academic Year

The regular academic year is divided into two terms, Fall and Spring. There is also the Summer term which is divided into several parts of term.

During a Fall or Spring term, there are two accelerated parts of term offered in a seven-week format during the full term.

Accounts

No student will be issued a diploma, certificate of credit, or transcript of record until all debts or obligations owed to the University have been satisfied.

Appeals

Graduate students have the right to appeal for cause any decision affecting their academic standing as graduate students. Cause excludes grade appeals, which are under the purview of the MTSU Grade Appeal Committee. The Appeal Advisory Committee of the Graduate Council is an ad hoc committee reporting to the dean of the College of Graduate Studies. The committee is convened at the discretion of the dean of the College of Graduate Studies.

The Graduate Council and the College of Graduate Studies have approved in principle the document ***Appeal Advisory Committee of the Graduate Council***. This document may be viewed on the website at www.mtsu.edu/graduate/pdf/StudentAppealsGradCouncil.pdf.

Cancellation of Scheduled Classes

The minimum enrollment requirement is ten students for upper-division and 5000-level graduate classes; eight students for 6000-level classes; and six enrollees for 7000-level classes (excluding graduate research courses). Any class may be canceled if the number of enrollees is deemed insufficient; however, no scheduled class may be discontinued without the approval of the dean of the college in which the course is offered.

Class Attendance

A student is expected to attend each class for which they are registered except in cases of unavoidable circumstances and should not attend classes for which they are not officially registered.

Even though some faculty may not check attendance in a conventional manner, attendance in classroom courses or participation in distance learning courses is expected, and absence or non-participation is recorded and will have an effect on receipt or repayment of financial aid and/or scholarships. Students who are reported for nonattendance will be assigned a grade of FA to appear on their transcripts, and nonattendance will be reported to appropriate agencies. Exceptions are made for University-sanctioned activities. Students shall not be penalized for such absences. Students anticipating participation in University functions which will take them out of classes should discuss these absences with their instructors at the earliest convenient time.

The fact that a student may be absent from a class does not in any way relieve that student of the responsibility for the work covered or assigned during the absence. It is the responsibility of faculty members to excuse or refuse to excuse absences of students who miss their classes. It is the responsibility of the student to obtain excuses for absences and to arrange with the faculty member in question to make up the work missed. Absences begin with the first date the student is enrolled in class.

If emergency circumstances prevent contacting the professor or department, the student may contact the MT OneStop for notification to the instructor(s) at (615) 494-8910. Only the instructor of the class concerned can excuse an absence.

MTSU does not usually close because of inclement weather, but students will be allowed to use their own discretion when snow and icy conditions exist; they will be given the opportunity to make up the missed classes should they decide not to attend. To determine if classes are cancelled, students should listen to area radio and television stations, call the news line at (615) 904-8215, or access the University home page at www.mtsu.edu/.

Any student who is absent from a state college or university during any school term or portion thereof in excess of thirty days due to active military service shall be entitled to withdraw and receive a tuition credit in the form of credit hours for each credit hour paid by, or on behalf of, such student, or a refund for any payments made. Tuition credit shall be given only if the reserve or National Guard student did not receive a final grade in the course for which tuition credit is sought.

Complaints and Grievances

Middle Tennessee State University wants to ensure all students have a positive educational experience, are treated fairly and courteously by University personnel, and are provided an outlet to address conditions and circumstances that concern them. Procedures for student complaints and grievances may be found at www.mtsu.edu/information/student-complaints.php.

Course Numbers

Course numbers 5000-5999 are combined undergraduate/graduate instruction with graduate students completing assignments appropriate for the graduate level. Students may take no more than 30% of their coursework at the 5000-level while earning a Master's degree (some programs are more restrictive). Courses numbered 6000-6999 are at the master's level, and 7000-7999 are at the doctorate level.

Credit Hour Unit

A credit hour unit is one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for 15 weeks, or equivalent academic activities, to achieve the student learning outcomes for the credit hour. Laboratory and studio classes usually earn one credit for each two hours of attendance or equivalent for a semester unless otherwise indicated.

Degree Works (Degree Plan)

Students may review their degree plan and progress through Degree Works (found in Pipeline MT). If there are any needed substitutions, they will need to complete a "Revision Form."

Dropping or Adding Courses

The procedures and deadlines to drop and add a class are listed online. A student who stops attending a class but does not officially drop the class will be assigned a grade of FA which will be recorded on the student's transcript. Students finding it necessary to withdraw from the University after having selected classes for a future term should use PipelineMT to drop all classes or initiate the withdrawal process at the MT OneStop, (615) 898-2111.
Dates may vary from term to term concerning whether the withdrawal should be accomplished in PipelineMT or in person at the MT OneStop. Check the appropriate registration guide for specific dates.

Email

MTSU communicates with students via the MTMAIL account issued to students during admission to the University. It is the student's responsibility to read emails in their MTMAIL accounts regularly.

Enrollment Verification

The following schedule of hours attempted will be used to determine the enrollment status requested by undergraduate students: Fall, Spring, and Summer semesters: full-time - 12 semester hours or more, three-quarter time - 9-11 hours, and half time - 6-8 hours, and less than half time 5 hours or less. Course withdrawal or reported for nonattendance may change enrollment status. In Fall and Spring terms, enrollment certifications are official beginning the fifth day of the term. MTSU has authorized the National Student Clearinghouse (NSC) to provide enrollment and degree verifications. NSC may be contacted at

National Student Clearinghouse
13454 Sunrise Valley Drive, Suite 300
Herndon, VA 20171-3280
Web: www.studentclearinghouse.org or degreeverify.com
E-mail: service@studentclearinghouse.org
Phone: (703) 742-4200
Fax: (703) 742-4239

Students may print their own enrollment verification free of charge by accessing PipelineMT ► Registration and Student Records ► Enrollment Verification. Preliminary verification can also be accessed prior to the fifth day of class.

Education Records at MTSU

The policy governing education records at MTSU may be accessed at www.mtsu.edu/policies/student-affairs/500.

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. Students must be afforded notice of their rights under FERPA and the types of personally identifiable information considered as directory information. The University policy may be accessed at www.mtsu.edu/policies/student-affairs/500.php.

Forms

The most common way to communicate information regarding student requests and changes is through dynamic (digital) forms. All current College of Graduate Studies forms can be found at www.mtsu.edu/graduate/forms.php. These forms are automatically routed to various entities at the University and eliminate the need for students to physically obtain signatures. Students also have a record of all forms filed, as does the College of Graduate Studies.

Grades

Following is a description of the criteria used in assigning letter grades:
A-work of distinctly superior quality and quantity accompanied by unusual evidence of achievement
B-work of good quality and quantity accompanied by evidence of achievement demonstrating the essentials of a course
C-work not demonstrating fulfillment of the essentials of a course
D-below the standards of acceptable quality, necessitating repetition of the course to fulfill requirement
F-failure, necessitating repetition of the course to obtain credit
FA-failure (and stopped attending)
P-passing (assigned only in certain courses)
I-incomplete (not used in calculating grade point average)
W-assigned in courses which are dropped during a specified period of time within a term. Students should consult online for specific dates each term.
NC-no credit (audit)
X-grade not submitted by instructor-not used in calculating grade point average
Plus/minus grading is used for graduate courses. Grades which may be assigned are

A, A-
B+, B, B-
C+, C, C-
D+, D, D-
F, FA

The grade I indicates that the student has not completed all course requirements because of illness or other uncontrollable circumstances, especially those which may occur toward the close of the term. Mere failure to make up work or turn in required work on time does not provide a basis for the grade of I unless the extenuating circumstances noted above are present for reasons acceptable to the instructor. The incomplete must be removed during the succeeding semester, excluding summer. Otherwise, the instructor default grade is entered. A student cannot make up the incomplete by registering and paying again for the same course. The I grade carries no value until converted to a final grade.
Pass or Satisfactory/Unsatisfactory grades are not used in determining the grade point average. However, satisfactory grades do count toward graduation credit requirements and are treated in every other respect as being equivalent to traditionally graded courses. Any course in which an "unsatisfactory" is received does not count toward graduation credit requirements.
Six semester hours of C grade (C+, C, C-) coursework may be applied toward a master's or specialist degree (unless prohibited by the degree program-see individual program for details); seven hours of C grade may count toward a Ph.D (some programs are more restrictive). No grade below C- may be applied toward a degree; however, all grades are included in the calculation of cumulative GPA.
Students may view their grades online each semester by selecting the appropriate option via PipelineMT. No student can view grades until all debts or obligations owed to MTSU have been discharged.

Grades, Appeal of Course Grades

An "appeal" is a request by a student for a determination by a Grade Appeals Committee of an assigned grade where inequities or unethical or unprofessional actions are alleged.

Level One

1. Student appeals should be resolved by a conference between the student and the faculty member who assigned the grade and held within ten business days of the official start of the following semester, not including Summer terms. If the grade is assigned during the Fall, the timeline begins in the Spring. For grades assigned during the Spring or Summer, the timeline begins in the Fall.
2. In the event of an impasse between the student and the faculty member, a student with a grade appeal shall discuss it with the department chair/director within ten business days of the conference with the involved faculty member. In cases where the department chair/director is the person against whom the complaint is

lodged, the dean in whose college the department is located shall assume the duties of the chair/director in the investigation and decision-making.

3. The department chair/director shall investigate the circumstances and record their findings. Although the department chair/director does not have the power to change the grade, they will make a recommendation concerning the appeal. The department chair/director will send a copy of the findings and recommendation to the student and to the faculty member within ten business days of the conference with the student. The student is required to include a copy of the department chair/director's findings and recommendation with other relevant materials submitted to request a formal grade appeal. (See Level Two below.) The recommendation and findings will become a part of the appeal record.

Level Two (can be initiated only after Level One has been completed)

1. If the student is not satisfied with the outcome of level one, they may, within fifteen business days following receipt of the department chair's/director's recommendation, refer the appeal, plus all relevant materials to the Office of the Provost. In addition to a copy of the department chair's/director's findings and recommendation, materials should include a written statement outlining the basis of the grade appeal. (See MTSU Grade Appeal Student Form.) The appeal to the Provost's Office must be submitted within forty business days of the official start of the term following the grade assignment, not including Summer terms. The overall Grade Appeals Committee will be divided by college into subcommittees. Each subcommittee will elect a chair. The vice provost for faculty affairs shall determine which subcommittee will hear the appeal and transmit the appeal documents to the subcommittee chair. A given subcommittee will not hear appeals originating in courses offered in its own college but will deal with appeals from other colleges.
2. Written notification of the meeting and of an opportunity to appear before the Grade Appeals Committee will be sent by the subcommittee chair to the concerned faculty member and student. The subcommittee will receive documents and hear testimony regarding the circumstances and shall render a written decision. A simple majority of members present constitutes a quorum for purposes of reaching a decision. Notification of the subcommittee's decision will be made by the subcommittee chair to the student, faculty member, department chair/director, college dean, vice provost for faculty affairs, and the registrar.
3. The decision of the subcommittee hearing the appeal will be final.

Miscellaneous

A. If a student's financial aid is reduced or not awarded due to the grade the student is appealing, the MTSU Financial Aid Office may not be able to reinstate the student's aid because of federal or state deadlines.
B. A student or faculty member involved with a grade appeal may discuss their case informally with a member of the faculty or administration, but not with a member of a Grade Appeals Committee. A committee member who discusses the grade appeal with the faculty member or student concerned shall automatically disqualify themselves from any further proceedings of the case.
C. The number of days indicated at each level above shall be considered the maximum, but every effort should be made to expedite the process.
D. The failure of the student to proceed from Level One of the appeal procedure to Level Two within the prescribed time limits shall be deemed to be an acceptance of the recommendations and/or decision rendered in Level One. All further considerations and proceedings regarding that particular appeal shall cease at that point.
E. A grade appeal may be withdrawn at any level without prejudice. However, the stated time frames continue to be applicable if the student determines to begin the process again.
F. All appeal proceedings shall be kept as confidential as may be appropriate at each level.
G. The Grade Appeals Committee shall have reasonable access to all official records for information necessary in making its determination.
H. Appeals of grades assigned in the Spring or Summer semesters will be considered in the Summer only under two (2) circumstances:
    1. If it affects the student's ability to graduate in the Summer; or
    2. If the vice provost determines that there are extenuating circumstances to warrant a special hearing.

I. Otherwise, such appeals will be held over until the beginning of the Fall semester. If an appeal is to be heard in the Summer, an ad hoc committee of the chairs/available members from each grade appeals committee will hear the case. If a chair cannot attend the Summer meeting, they will, if at all possible, endeavor to provide a replacement from their committee. The chair from the college in which the appeal originated shall be excused from the meeting. There will also be a student representative assigned with one alternate, each not from the college from which the appeal originates.

Grades, Grade Point Average

Grade points are numerical values assigned to letter grades in order to provide a basis for quantitative determination of grade (quality) point averages. The four-point system with pluses and minuses is used.
The following system is used in determining grade point average:

Grade		Quality Points (per credit hour)
A	=	4.00
A-	=	3.67
B+	=	3.33
B	=	3.00
B-	=	2.67
C+	=	2.33
C	=	2.00
C-	=	1.67
D+	=	1.33
D	=	1.00
D-	=	0.67
F	=	0.00

The academic standing of a student is expressed in terms of grade point average which is calculated by dividing the total number of quality points by the total number of GPA hours. Following is an example:

Course	**Credit Hours**	**Grade/(Point Value)**	**Points**
ENGL 6015	3	B- (2.67)	8.01
ENGL 6051	3	A (4.00)	12.00
ENGL 6221	3	A- (3.67)	11.01
	9		**31.02**

To get the quality points listed in the points column, the credit hours are multiplied by the point value of the grade earned; then add the credit hours and add the points columns to get totals for each; then the total for the points (31.02) is divided by the total for the credit hours (9) to obtain the GPA (3.45).
The GPA is rounded and truncated after the thousands position, and no further rounding up or down of the GPA is done in determining eligibility for retention, graduation, honors, dean's list designation, or taking an overload.
The section on Repeated Courses explains the computation of the GPA for students who repeat courses. The grade of F counts as GPA hours with zero quality points earned; P grades carry hours earned but no quality points or GPA hours.
The scholastic standing of a student is expressed in terms of grade point average (GPA). A GPA is the total number of grade points divided by the total number of credit hours (exclusive of P, S, and U credit hours) at Middle Tennessee State University. Any transferred courses are included in the calculation.

Graduation

Graduation is conducted at the close of the Fall, Spring, and Summer terms. Murphy Center is the site of this important occasion. Students who plan to graduate should fill out an "Intent to Graduate" form, available on the College of Graduate Studies website (mtsu.edu/graduate/forms.php). This form must be filed by the student by the end of the second week of the semester in which the student plans to graduate or no later than the end of the first week of S2-June term (for August graduation).

Students may review progress toward degree completion by using DegreeWorks in PipelineMT.

All students must complete the general requirements as prescribed by the College of Graduate Studies and the specific requirements set forth for the degree sought. A student must have at least a 3.00 GPA (3.25 for doctoral degrees) overall to graduate. No student will be issued a diploma, certificate of credit, or transcript of their record until all debts or obligations owed to the University have been satisfied. All requirements for a degree must be met by the time of graduation. This includes incomplete grades.

Identification Card

The MTSU BlueID card identifies MTSU students, faculty, and staff for access to campus services and privileges. The BlueID card may be used to check out books at the library; be admitted to the Campus Recreation Center, campus computer labs, and residence halls; cash checks; attend campus events and purchase extra tickets; receive student health services; and pay for food via student meal and budget plans.

The BlueID card may be used as a debit card. Students may deposit money into a RAIDER FUND$ account; then, use the BlueID card rather than cash or checks for purchases at the campus bookstore, to pay registration fees, buy a soft drink or snack, or to purchase meals at any of the food service locations on campus.

The first card is issued at no charge; however, there is a $10 charge for replacing lost or stolen IDs. If the card breaks or is damaged, it should be returned to the BlueID office and a new card will be issued at no charge. The BlueID office is located at the Student Services and Admission Center, Room 112.

Minor

A minor is a component of a degree and is not a stand-alone credential. A minor cannot be earned unless a student is enrolled in a degree program.

Prerequisites

The prerequisite for the graduate program is an undergraduate minor or its equivalent and/or the recommendation of the graduate program director. The prerequisite for the graduate minor is 12 semester hours of undergraduate coursework in that area or its equivalent and/or the recommendation of the graduate program director or delegate. If prerequisite coursework is marginally deficient, the student may be admitted to the College of Graduate Studies to make up the deficiencies concomitantly while taking graduate courses. Prerequisite courses do not apply toward meeting graduate program requirements. Monitoring the completion of prerequisites is the responsibility of the individual departments. In order to qualify for financial aid, prerequisites must appear in the catalog under the program listing. If a student is required to take one or more prerequisites, then they must fill out the "Prerequisite Verification Form" which can be found at mtsu.edu/graduate/forms.php.

Repeated Courses

A graduate student may repeat graduate courses in which a grade of B- or lower was earned. However, there are certain restrictions and limitations. A maximum of two courses, not to exceed eight credits combined, may be replaced in a student's GPA calculation. The grade in the second attempt replaces the original assigned grade in the first attempt regardless of the earned grade. For all additional courses or subsequent repeated courses, there will be no grade replacement; i.e., all earned grades will be used in the grade point average calculation and are recorded on the transcript. Note that the grade(s) for the previous attempt(s) will remain on the transcript. The replacement only occurs in the GPA calculation.

Graduate students may not repeat a course in which they have previously earned the grade of A, A-, B+, or B without written approval from the graduate program director and dean of the College of Graduate Studies. If granted, there

will be no grade replacement in the GPA calculation; i.e., all attempts will be used in the grade point average calculation and recorded on the transcript.
Note that there are financial aid implications for repeating a course more than once. Also, veterans receiving educational assistance benefits may not repeat courses previously passed and receive veterans financial assistance for such unless a minimum grade is required in the program.
To receive permission, fill out the "Request to Repeat Course" form at mtsu.edu/graduate/forms.php.

Schedule

The schedule of courses provided online each semester is for the convenience and guidance of students and faculty. The University reserves the right to change courses and schedules when the interest of all concerned may best be served.

Semester Hour Load

A student's enrollment status is determined by the number of credit hours taken per term according to the following:

Full-time - 9-12 graduate hours
Three-quarter time - 7-8 graduate hours
One-half time - 5-6 graduate hours

Graduate students are limited to a maximum of 12 graduate hours per semester. If an exception is requested, overload forms must be signed by the graduate program director and the dean of the College of Graduate Studies.

Stop-out

Events in life such as family leave, illness, or military duty-may result in a student being unable to maintain continuous enrollment. In such a case, students may request permission to interrupt their studies on a temporary basis. A stop-out is the period of time during which a student fails to register for successive academic sessions. If the stop-out period exceeds one academic year (Fall and Spring semesters), the student may be required to fulfill degree requirements in existence at the time of reenrollment, rather than those in place at the original matriculation. A formal "Request to Stop-Out Form" must be filed by the student, endorsed by the graduate program director in the department, and approved by the dean of the College of Graduate Studies prior to the beginning of the stop-out period (mtsu.edu/graduate/forms.php). If approved prior to the beginning of the stop-out, this period is not counted toward the time limit for degree completion. A stop-out may be utilized no more than one time during the time limit for the degree program. When a stop-out student is ready to return, they must fill out a re-application to the program.

Teacher Education Program, Postbaccalaureate

The post-baccalaureate teacher education program is designed for individuals who have completed a baccalaureate degree but who did not complete teacher preparation. The College of Education requires candidates to address any course and program deficiencies in their undergraduate education to ensure the attainment of the knowledge and skills required in general education, professional education, and the major for the teaching field. Additional coursework and program requirements will be determined by the teacher licensure analyst. Transcript analysis forms for the post-baccalaureate program are available at
www.mtsu.edu/education/docs/Request_for_Transcript_Analysis_Traditional_08302018.pdf.
Postbaccalaureate students must also make formal application for admission to the teacher education program. Admission to teacher education is a prerequisite to enrollment in upper-division courses in Elementary Education (ELED), Reading (Literacy) (READ), Special Education (SPED) (except SPED 3010), Foundations of Education (FOED), or Youth Education (YOED).

Teacher Licensure

All applications for professional teaching licenses in Tennessee must be filed with the dean of the College of Education who is responsible for recommending each applicant from this University. All applicants for teacher licensure should furnish the Tennessee State Department of Education a report of scores attained on the Praxis. A

copy of the scores should be sent to the Office of the Dean, College of Education. MTSU verification of the scores will be forwarded with the Application for Licensure.

Time Limit

Students have six years from the initial semester of matriculation to complete the requirements for a master's or specialist degree or a certificate. There is a ten-year time limit from initial matriculation to complete all requirements for the doctoral degree. Exceptions to these time limitations, for good cause, will be considered by the dean of the College of Graduate Studies when submitted in writing with a proposed timeline for completion and the recommendation of the advisor and the graduate program director. Such requests should be made by using the Time Limit Extension for Graduation Request form found at www.mtsu.edu/graduate/forms.php.

Transcript of Credits

Official copies of a student's record are furnished upon request with written signature by the student at the MT OneStop or may be ordered 24/7 through TranscriptsPlus. Information can be found at www.mtsu.edu/transcripts. No student will be issued a diploma, certificate of credit, or transcript of record until all debts or obligations owed to MTSU have been satisfied. Unofficial copies may be viewed on PipelineMT provided all debts or obligations are satisfied. Students with holds may come to the MT OneStop in the SSAC and present a photo ID to be informed of their grades.

Transfer Credits

In general, only coursework taken while in graduate status, prior to attending MTSU, will be transferred. Coursework transferred or accepted for credit toward a graduate degree must represent graduate coursework relevant to the degree, with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the institution's own graduate degree programs. Transfer credit requires the recommendation of the graduate program director and approval of the dean of the College of Graduate Studies. Transfer courses with grades below B will not be accepted for credit in any graduate degree programs. Also, note that credits completed seven or more years prior to admission to a degree program at MTSU will not generally be considered for transfer. If a student completed credits for a previous degree that would result in repetition of courses or content, then credits from a previous degree may be used toward the new degree. However, at least 24 hours of unique coursework (coursework not counted in a previous degree) must be counted toward a second Master's degree or a second Specialist degree.

Up to 12 hours of credit may be transferred. Up to 9 hours may be obtained through prior learning assessment or 12 hours combined prior learning assessment and transfer credit may be applied.

For certificate programs, the time limit is six (6) years beginning with the date of the earliest credit applied to the degree, including transfer credits.

Doctoral students should check with their graduate program director for the policy on transfer of credits into their doctoral degree program.

Withdrawals from the University

The MT OneStop handles all issues relating to withdrawing from the University. Please visit www.mtsu.edu/withdraw/ for up-to-date information regarding the withdrawal process. Students are strongly encouraged to consult with their program advisor and the MT OneStop before making any decisions about withdrawing. Please also consult the Registration Guide (www.mtsu.edu/registration/registration-guide.php) for withdrawal and fee adjustment deadlines. Questions about withdrawing should be directed to the MT OneStop in SSAC, via phone at (615) 898-2111, or via email at withdraw@mtsu.edu.

General Withdrawal Guidelines:

1. Withdrawing Prior to Term - Students finding it necessary to withdraw from all classes prior to the beginning of a term may withdraw via PipelineMT.
2. Withdrawing During a Term
    a. During the first two weeks (14 calendar days) of a term, courses may be dropped via PipelineMT without assignment of a grade on the official transcript.
    b. Beginning on the 15th calendar day through 60 percent of a term, students can drop some or all courses via PipelineMT and a grade of "W" will be assigned.
    c. After 60 percent of the term, a complete withdrawal from ALL classes can be accomplished via PipelineMT, through the last day to withdraw in each term. Instructors assign the appropriate grade of "W" if the student is passing or "F/FA" if the student is failing.
    d. After 60 percent of the term, individual courses cannot be dropped via PipelineMT. Individual courses may be dropped if appropriate signatures are obtained on a drop form and submitted to the MT OneStop.
    e. The deadline to withdraw from the University (all classes) and receive a grade of "W" or "F," as determined by the instructor is generally one week prior to the last day of classes and will be noted in the Registration Guide for each term.

NOTE: ***Fees, Financial Aid, Graduate Assistantships, Housing, etc. can be impacted anytime a student withdraws, stops attending, or drops a course. Consult the Registration Guide and those offices for more information.***

Summer differs; please check Registration Guide for specific dates.

If extreme extenuating circumstances necessitate a student's withdrawal from the University after 60% of the term, exceptions may be made. A grade of "W" may be recorded with written concurrence of the faculty member, but only if the extenuating circumstances are first verified by the MT OneStop. Students who fall under this category should schedule an appointment with the withdrawal coordinator in the MT OneStop and provide a written statement and all documentation to support their extenuating circumstances. The University Withdrawal Policy can be reviewed at www.mtsu.edu/policies/student-affairs/505.php.

Minimum Degree Requirements for Graduate Academic Programs

Doctoral Degrees

Middle Tennessee State University offers the Doctor of Philosophy (Ph.D.) degree in Economics, English, Human Performance, Literacy Studies, Computational and Data Science, Mathematics and Science Education, Molecular Biosciences, and Public History and the Doctor of Education (Ed.D.) degree in Assessment Learning and Student Success. The Ph.D. and Ed.D. degrees are offered for the purpose of developing doctoral-level expertise combining pedagogy with scholarly achievement and research excellence (applied or theoretical). Above all, doctoral degree recipients from MTSU are scholars who have acquired advanced academic skills and are well prepared to teach at the collegiate level, conduct independent scholarly investigation, and provide service to the private and public sectors associated with their academic discipline.

Admission

General admission requirements for a doctoral degree may be found in the admission section of this catalog. Applicants for admission to this degree must hold a baccalaureate degree from an accredited university. Although a master's degree is not a general University requirement, each graduate program has the option of establishing such a requisite.

General Course and Credit Requirements

The required minimum is 60 semester hours of coursework with at least two-thirds of the program at the 7000 level. No more than 12 semester hours of dissertation research (course 7640) may be applied toward this 60-hour requirement. If recommended by the student's graduate advisor and approved by the graduate dean, a limited number of semester hours of coursework taken at the master's level may be applied toward this 60-hour requirement.

The 60-credit requirement must include the following:

a. At least 42 hours (48 hours for the Ed.D.) in discipline-specific coursework. Undergraduate or dual-listed 4000/5000 courses (or their equivalents) **cannot** be used toward this requirement.
b. At least 12 semester hours of dissertation research (course 7640).
   Once Ph.D. students have begun enrolling in dissertation research, they are expected to enroll in at least 1 semester hour of dissertation research (exclusive of Summer semester) until the dissertation is completed. Failure to maintain continuous enrollment while in the dissertation phase will require the student to apply for readmission to the program. Readmission is not guaranteed.

Additional Program Requirements

Each doctoral program establishes degree requirements that are specific to that discipline and may exceed the minimum University requirements. Students should consult the appropriate graduate program section in this catalog. The graduate program director may specify additional requirements above the required 60 hours for the degree, such as prerequisites, publication of research-based articles, and/or presentation of a research-based conference paper.

Pre-dissertation Advisory Committee

As soon as practicable, each doctoral student will be assigned an advisor or advisory committee. The advisor/committee is appointed by the graduate program director, in consultation with the student and the potential major professor. If warranted, the advisor/committee membership may be reconstituted upon a recommendation from the graduate program director and approval by the dean of the College of Graduate Studies. Advisory committee members and any changes must be submitted to the College of Graduate Studies through the appropriate form found at www.mtsu.edu/graduate/forms.php. Members of the committee must hold the appropriate Graduate Faculty Status according to their role.

The advisor/committee provides academic guidance to formulate a curricular plan best suited for the academic needs and interests of the student.

Examinations

Each doctoral. student may be required to take a set of examinations administered by a graduate program. A less than satisfactory outcome (including a fail decision on any component of the examinations) may result in additional academic requirements and/or a re-examination. A re-examination may be given only once. A second fail decision on any component of the examinations results in a recommendation to the dean of the College of Graduate Studies for academic dismissal. The student may appeal the dismissal recommendation, for cause, to the dean of the College of Graduate Studies who will then refer the appeal to the Graduate Council. For the details of the policy and procedures, see www.mtsu.edu/graduate/pdf/StudentAppealsGradCouncil.pdf.

Qualifying Examinations: Each doctoral student may be required to take a qualifying examination. The qualifying examination is administered by a graduate program early in the student's doctoral program; often after the first year of the doctoral program. Students should consult with their advisors as to the individual program's policy on the timing and content of the administration. It may assess overall knowledge upon entry into the program or prior to entering the dissertation phase. The results of this examination should be used, in part, to plan the student's academic program. To be eligible to take this examination, the student must be fully admitted to the graduate program. Programs may have additional requirements or assess students by different means. The student should contact the individual program to determine qualifying examination requirements.

Preliminary Examination: The doctoral student must also pass an additional or subsequent written and/or oral examination. This examination is referred to as the Preliminary Examination. The student must be in good academic standing and must have at least a 3.25 grade point average in all graduate work.The preliminary examination is intended to assess whether a candidate is qualified to continue in a doctoral program, advance to candidacy, and pursue dissertation work.

All written examinations are given before the close of the Fall, Spring, and/or Summer semesters. Permission for the Ph.D. student to schedule the preliminary examination requires the approval of the student's advisory committee. The student should contact the individual program to determine the deadlines for submitting these applications.

A satisfactory or passing performance on the written and/or oral examinations means that the candidate is qualified to continue the program as planned.

Written Preliminary Examination

1. The purpose of the written examination is to evaluate the candidate's overall knowledge of the field, integrative skills, ability to organize material, and competency in written expression. The maximum time limit per section for the written examination is eight hours.
2. The written examination is administered by the graduate program.
3. The graded written examinations are maintained in the department for a period of five years and are available to the student upon request.

Oral Preliminary Examination

The oral examination is administered by the student's advisory committee and covers the candidate's area of specialization and general knowledge. The committee evaluates the candidate's breadth of knowledge of the field(s), integration and problem-solving skills, competency in oral expression, and potential for conducting independent research.

Advancement to Candidacy

After a student successfully completes the preliminary examination, the program will send the results to the College of Graduate Studies via the Graduate Test Results form found at www.mtsu.edu/graduate/forms.php. At that time the dissertation committee is formally constituted and usually has the same membership as the pre-dissertation advisory committee, although this is not mandatory. For example, should the student's research area change, it may be appropriate to replace one or more of the original advisory committee members with faculty better qualified to provide research mentoring in the new area of inquiry.

Defense of Dissertation

Upon submission of the completed dissertation, the doctoral candidate who has successfully completed all requirements for the degree will be scheduled by the chair of the dissertation committee, in consultation with the other committee members, to defend the dissertation. The College of Graduate Studies must be notified of the dissertation title, date, time, and location of the defense at least two weeks prior to the date of the examination via the "Dissertation Defense Announcement Request Form" (www.mtsu.edu/graduate/forms.php). The defense is open to all members of the University community who wish to attend. The dissertation defense is administered by the dissertation committee according to program guidelines. Successful defense of the dissertation must be attested to by all members of the dissertation committee by means of the "Thesis/Dissertation Approval Page" (www.mtsu.edu/graduate/forms.php). Students must then upload their dissertation into ProQuest by the published deadline in order to graduate in that semester. If a student submits the dissertation between the published deadline and graduation day, the student will graduate the following semester but will not be required to enroll in any further hours. Guidelines for the dissertation vary from department to department. While the responsibility for the technical quality and content of the dissertation lies in the advising committee, the College of Graduate Studies imposes format requirements to ensure an appropriate appearance for the dissertation. Final responsibility for the dissertation lies with the author. The University reserves the right to refuse any manuscript that does not conform to the "MTSU Thesis and Dissertation University Style Guide" formatting guidelines, is not in suitable condition for archiving, is in any form plagiarized or fabricated, or does not meet the quality standard expected of a dissertation (www.mtsu.edu/graduate/student/docs/MTSUStyleGuide2021.pdf). Thus, a dissertation not meeting standards may be rejected by the dean of the College of Graduate Studies and graduation delayed.

Residency

Residency requirements are established by each program, pending Graduate Council approval. Students must be enrolled in at least 1 credit hour in the semester in which they graduate unless they have met the deadline for submission in the previous semester which waives this requirement.

Time Limit

There is a ten-year limit for completing all doctoral degree requirements. Thus, all coursework offered toward the doctoral degree as well as the dissertation must be completed within ten years after matriculation (i.e., the first semester of enrollment). All graduate level coursework considered for transfer credit into the Ph.D. program must be degree-applicable and have been completed within seven years prior to the first enrollment in the doctoral program.

Transfer Credits

Only coursework completed at an accredited institution that would count toward the doctorate there will be considered for approval as transfer credit toward the Doctor of Philosophy coursework requirement at MTSU. Additional information on transfer credit may be found in the section on academic regulations.

Intent to Graduate

By the end of the second full week of the term in which the student intends to graduate, or by the end of the first week of the Summer June Term (for August graduation), the candidate must file an "Intent to Graduate Form" (mtsu.edu/graduate/forms.php) with the College of Graduate Studies, and complete the College of Graduate Studies exit survey. All degree requirements must be completed prior to the date of graduation. If a student will not complete the degree in that semester, they should withdraw their "Intent to Graduate Form" (with the appropriate form) and fill out a new form for the semester in which they will graduate.

Specialist Degrees (Ed.S.)

Middle Tennessee State University offers the Specialist in Education (Ed.S.) degree in Administration and Supervision, Curriculum and Instruction, and Professional Counseling. The Ed.S. degree is provided specifically for teachers, counselors, and administrators wishing to pursue graduate study beyond the master's level.

Admission Requirements

Applicants must meet the admission requirements for degree-seeking students and submit any additional materials required by the major program of study. (See relevant program for specific requirements.)
All applicants must hold a bachelor's degree from an accredited university; some programs require a master's degree from an accredited university.

General Course and Credit Requirements

The required minimum is 30 semester hours of coursework. (Professional Counseling requires a minimum of 61 hours.)
Specialist candidates must successfully complete all graduate program requirements. Specific degree requirements are found under the applicable program listing.

Additional Program Requirements

Each specialist program establishes degree requirements that are specific to that discipline and may be in excess of the minimum University requirements. Students should consult the appropriate graduate program section in this catalog. The graduate program director may specify additional requirements above the required hours for the degree, such as prerequisites.

Comprehensive Examinations

If required, comprehensive examinations are scheduled by each department during the last part of the semester in which the student expects to graduate. These may be oral, written, or both. This test is not merely a reexamination of coursework, but it is an assessment of the candidate's ability to integrate scholarly information linking the major and related fields. The comprehensive examinations may be attempted no more than twice.

Residency

Residency requirements are established by each program, pending Graduate Council approval. Students must be enrolled in at least 1 credit hour in the semester in which they graduate.

Time Limit

There is a 6-year limit for completing all specialist degree requirements. Thus, all coursework offered toward the specialist degree as well as any other requirements must be completed within 6 years after matriculation (the first semester of enrollment). All graduate level coursework considered for transfer credit into the specialist program must be degree-applicable and have been completed within 7 years prior to the first enrollment in the specialist program.

Intent to Graduate

By the end of the second full week of the term in which the student intends to graduate, or by the end of the first week of the Summer June Term (for August graduation), the candidate must file an "Intent to Graduate Form" (mtsu.edu/graduate/forms.php) with the College of Graduate Studies and complete the College of Graduate Studies exit survey. All degree requirements must be completed prior to the date of graduation.

Second Specialist Degree from MTSU

An individual who has received a specialist degree may obtain a second specialist degree with a minimum of 24 additional semester hours of graduate coursework earned at MTSU if approved in advance by the graduate program and the graduate dean. All specific course requirements must be met for the second degree, unless otherwise specified, including the written comprehensive examinations.

Master's Degrees

Middle Tennessee State University offers a wide array of master's degree programs. These include the Master of Accountancy (M.Acc.: Accounting), Master of Arts (M.A.: Economics, English, History, International Affairs, Liberal Arts, Psychology, and Sociology), the Master of Arts in Teaching (M.A.T.: Foreign Languages), the Master of Business Administration (M.B.A.: Business Administration), the Master of Criminal Justice (M.C.J.: Criminal Justice Administration), the Master of Education (M.Ed.: Administration and Supervision, Curriculum and Instruction, Literacy, and Special Education), the Master of Fine Arts (M.F.A.: Recording Arts and Technologies), the Master of Library Science (M.L.S.: Library Science), the Master of Music (M.M.: Music), the Master of Professional Studies (M.P.S.: Professional Studies), the Master of Public Health (M.P.H.: Public Health), the Master of Science (M.S.: Aeronautical Science, Biology, Chemistry, Computer Science, Engineering Technology, Exercise Science, Finance, Geosciences, Horse Science, Information Systems, Leisure Sport and Tourism, Management, Mathematics, Media and Communication, Physician Assistant Studies [pending SACSCOC approval), and Professional Science), the Master of Science in Nursing (M.S.N.: Nursing), and the Master of Social Work (M.S.W.: Social Work).

Admissions

Applicants must meet the admission requirements for degree-seeking students and submit any additional materials required by the major program of study (see relevant department for specific requirements). All applicants must hold a bachelor's degree from an accredited university.

General Course and Credit Requirements

The university required minimum credit hours for a Master's program is 30 semester hours of coursework. Actual minimum credit hours vary depending on program.
All master's candidates must

1. satisfactorily complete the undergraduate prerequisites.
2. complete a minimum of 30 (or more) semester hours of graduate coursework. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours (5000-level courses). No undergraduate courses may apply toward the graduate program requirements.
3. complete all specific graduate program requirements.

Comprehensive Examinations

If required, comprehensive examinations are scheduled by each department during the last part of the semester in which the student expects to graduate. These may be oral, written, or both. This test is not merely a reexamination of coursework, but it is an assessment of the candidate's ability to integrate scholarly information linking the major and related fields. The comprehensive examinations may be attempted no more than twice.

Additional Program Requirements

Each master's program establishes degree requirements that are specific to that discipline and may be exceed minimum University requirements. Students should consult the appropriate graduate program section in this catalog. The graduate program director may also specify additional requirements above the required hours for the degree, such as prerequisites, foreign language proficiency, and etc.

Thesis

Some Master's degree programs require a thesis, a significant written work reflecting independent and unique research. Students will need to submit an "Advisory Committee Form" before beginning their research (www.mtsu.edu/graduate/forms.php). The thesis in final form must be electronically submitted to ProQuest no later than the date specified in the Academic Calendar, which is approximately four weeks before graduation. It must be approved by the committee chair and members, the graduate program director, and the dean of the College of Graduate Studies, using the "Thesis/Dissertation Approval Page." Guidelines for the theses vary from department to department. While the responsibility for the technical quality and content of the thesis lies in the graduate committee, the College of Graduate Studies imposes format requirements to ensure an appropriate appearance for the thesis.

Final responsibility for the thesis lies with the author. The University reserves the right to refuse any manuscript that does not conform to the "MTSU Thesis and Dissertation University Style Guide" formatting guidelines, is not in suitable condition for archiving, is in any form plagiarized or fabricated, or does not meet the quality standard expected of a graduate thesis (www.mtsu.edu/graduate/student/docs/MTSUStyleGuide2019.pdf). Thus, a thesis not meeting standards may be rejected by the dean of the College of Graduate Studies and graduation delayed.
Once students have begun taking thesis research hours, they are expected to enroll in at least 1 semester hour of thesis research (course 6640) until the thesis is completed. If a student submits the thesis between the published deadline and graduation day, the student will graduate the following semester but will not be required to enroll an any further hours. Students may enroll in more thesis hours than required for the degree, and these hours will appear on their transcript. Thesis hours may not be used as substitutes for other course requirements.
NOTE*: Additional thesis hours do not qualify for financial aid.*

Residency

Residency requirements are established by each program, pending Graduate Council approval. Students must be enrolled in at least 1 credit hour in the semester in which they graduate.

Time Limit

There is a six-year limit for completing all master's degree requirements. Thus, all coursework offered toward the master's degree as well as any other requirements must be completed within six years after matriculation (the first semester of enrollment). All graduate level coursework considered for transfer credit into the master's program must be degree-applicable and have been completed within seven years prior to the first enrollment in the master's program.

Intent to Graduate

By the end of the second full week of the term in which the student intends to graduate, or by the end of the first week of the Summer June Term (for August graduation), the candidate must file an Intent to Graduate form (mtsu.edu/graduate/forms.php) with the College of Graduate Studies and complete the College of Graduate Studies exit survey. All degree requirements must be completed prior to the date of graduation.

Second Master's Degree from MTSU

An individual who has received a master's degree may obtain a second master's degree with a minimum of 24 additional semester hours of graduate coursework earned at MTSU if approved in advance by the graduate program and the graduate dean. All specific course requirements must be met for the second degree, unless otherwise specified, including the written comprehensive examinations.

Graduate Certificate Programs

Graduate certificate programs provide advanced study beyond the baccalaureate degree and are intended as both professional development and as an intermediate step towards a desired graduate degree. They can also add specialized expertise for students completing a graduate degree. Middle Tennessee State University offers graduate certificates in Applied Social Research, Assurance, College and University Teaching, Data Science, Gerontology, Health Care Management, Museum Management, Psychiatric Mental Health Nurse Practitioner, Tax, United States Culture and Education, and Women's and Gender Studies. The certificate in United States Culture and Education is open only to international students.
NOTE: *Students enrolled in graduate certificate programs are not eligible for federal financial aid.*

Admissions

Applicants must meet the admission requirements for degree-seeking students and submit any additional materials required by the certificate program (see relevant department for specific requirements.) All applicants must hold a bachelor's degree from an accredited university.

General Course and Credit Requirements

The required minimum credit hours for a Graduate Certificate program is 12 semester hours of coursework. Minimum credit hours vary depending on program.
All certificate candidates must:

1. complete a minimum of 12 (or more) semester hours of graduate coursework.) No undergraduate courses may apply toward the graduate program requirements.
2. complete all specific certificate program requirements.

Additional Program Requirements

Each certificate program establishes requirements that are specific to that discipline and may be in excess of the minimum University requirements. Students should consult the appropriate graduate program section in this catalog. The graduate certificate program director may specify additional requirements above the required hours for the degree where appropriate.

Residency

Residency requirements are established by each program, pending Graduate Council approval. Students must be enrolled in at least 1 credit hour in the semester in which they graduate.

Time Limit

The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.

Intent to Graduate

By the end of the second full week of the term in which the student intends to graduate, or by the end of the first week of the Summer June Term (for August graduation), the candidate must file an Intent to Graduate form (mtsu.edu/graduate/forms.php) with the College of Graduate Studies and complete the College of Graduate Studies exit survey. All degree requirements must be completed prior to the date of graduation.

Professional Licensure Disclosure

Middle Tennessee State University (MTSU) offers multiple programs designed to meet educational requirements for a professional license or certification required for employment in an occupation in Tennessee. Completion of an MTSU program may not meet educational requirements for licensure in other U.S. states or territories. Licensing agencies or boards may have requirements in addition to an earned degree. Students should be aware that licensure requirements vary from state to state and are subject to change. MTSU has not made a determination whether all of these programs will meet all of the certification requirements of a U.S. state or territory. MTSU recommends that students who are not located in Tennessee or who plan to seek licensure or certification outside the state of Tennessee contact the appropriate licensing agency or board before they enroll in an academic program designed to lead to licensure or certification and discuss their plans with an advisor.

A full list of programs with information on how to obtain current licensure and certification requirements for states and territories is available on MTSU's "Institutional Disclosures for Consumers" webpage at www.mtsu.edu/information/professional-licensure-disclosures.php.

Libraries/Archives/Centers

Numerous library and archive resources are located on the MTSU campus. Copying of materials housed in these facilities is permitted only in compliance with federal copyright statutes and in accordance with departmental rules and regulations.

Libraries

Albert Gore Research Center

The Albert Gore Research Center serves the campus community and members of the public interested in American politics, the history of MTSU, veterans' and military history, and regional history. You can visit the center in TODD 128 weekdays from 9:00 am to 4:00 pm and online at www.mtsu.edu/gorecenter/index.php.

The Albert Gore Research Center has especially strong collections documenting **American government and political activism**. It holds the papers of Albert Gore Sr., (MTSU '32) from his years in the U.S. House and Senate and the records of Representative Bart Gordon (MTSU '71), Representative LaMar Baker, Representative Bill Boner (MTSU '67), Representative Jim Cooper, and Representative Richard Fulton and Representative Clifford Allen . Tennessee state legislators' materials include the records of LaMar Baker, John Bragg (MTSU '40), Frank Buck, Jim Cummings, Buford Ellington, John Hood (MTSU '54, '74), and Andy Womack (MTSU '70). The center also holds the records of numerous political activists and citizen groups. The center is a member of the Association of Centers for the Study of Congress and a leader in the archiving of Congressional electronic records.

As the **institutional archive for Middle Tennessee State University**, the center holds the official records of MTSU programs and departments as well as the papers of alumni, faculty, staff, and campus organizations. A rich collection of photographs documents all aspects of MTSU campus life from its founding in 1911 to the present. MTSU publications such as yearbooks and media productions are also part of the University archive.

Materials related to **American veterans and the home front** document the American military experience from the Civil War to the present. Collections related to World War II are especially rich, and include the papers of and oral histories with veterans of that war as well as documents and artifacts from the Tennessee Maneuvers. The center is a partner in the Library of Congress Veterans History Project.

The research center has significant collections about local history and culture. Many organizations and businesses have chosen the center to preserve their history. Middle Tennessee women hold a prominent place in the center's collections in the records of individual women and women's organizations.

James E. Walker Library

The James E. Walker Library is one of the leading Tennessee university libraries in its range of high-impact services and its research collection. The library collection has 1.5 million physical and electronic volumes, nearly 600 databases, and access to millions of journal, magazine, and newspaper articles, as well as access to streaming audio and video. Electronic resources are available anytime, anywhere to MTSU students. Among its specialized collections are a Special Collection that provides access to rare, artist, and dimensional books on a variety of subjects; a Curriculum Collection that provides a model library for K-12 education students; and a Listening and Viewing Center consisting of music scores and recordings.

Walker Library provides the necessary research and study support for undergraduate students. The library offers a variety of study spaces, including collaborative study rooms to work on group projects and presentation practice rooms; current technology such as computers, laptops, scanners, and printers; and expert staff to assist in conducting research and effectively using technology.

Need assistance finding resources for that paper or project? The Reference Desk is staffed with skilled professionals who can help students with their research and using any of the online resources. Schedule an appointment with a subject liaison for more in-depth subject assistance.

The library is an innovative work and study space on campus. Find technology and expert assistance in utilizing a variety of software and devices across the library. Get assistance from staff at the Technology Services Desk on how to access the campus network, using campus online course systems, checking out laptops, and other technology

related services. Express your creativity in the Makerspace and work on multimedia projects, 3D printing, augmented and virtual reality, robotics, and much more.
Walker Library also hosts other student services, including tutoring, the writing center, an adaptive technology lab, and a Starbucks coffee shop. The library provides a full range of student support in one location and is a hub for student work and creative activity.
More information can be found on the library's website at library.mtsu.edu/.

Women's and Gender Studies Library

The Women's and Gender Studies Program, located in JUB 308, maintains a collection of books and other research materials related to women's and gender studies. Most volumes circulate.

Centers

Center for Health and Human Services

The Center for Health and Human Services is a federation of academic units that share the common goal of preparing the health and human services workforce in Tennessee. Coordinated by the chairholder of the Adams Chair of Excellence in Health Care Services, the center encourages quality interdisciplinary education, research, and service programs in health and human service areas. The center also collaborates with public agencies and private not-for-profit organizations to develop and implement programs designed to improve the health of the middle and greater Tennessee community. MTSU programs affiliated with this center include Aging Studies; School of Nursing; Departments of Psychology, Sociology and Anthropology, Social Work, Health and Human Performance, and Human Sciences; Communication Disorders; Pre-professional Health Sciences; and graduate studies in gerontology and health care management.

Center for Historic Preservation

One of two Centers of Excellence at MTSU, the Center for Historic Preservation (www.mtsuhistpres.org/) was established in 1984. The center joins with communities to interpret and promote their heritage assets through education, research, and preservation. With the assistance of both graduate and undergraduate students, the center practices "boots-on-the-ground" historic preservation. Center staff go to property owners, communities, and elected officials and listen carefully to what they wish to achieve with their history. They then work together through reciprocal partnerships to craft a plan to move forward, helping our partners integrate their pasts, historic sites, and traditions into tools for stronger communities, enhanced economic opportunities, and more meaningful engagement with their fellow citizens on what is significant to them, and in turn to the state and nation. Providing leadership and assistance on a local, state, regional, and national basis, the center's work falls within five initiatives.
Rural preservation recognizes the unique heritage, resources, and problems of rural areas and small towns. The overall goal is to create a heritage infrastructure for successful, long-term project development in small towns that have outstanding resources but lack the expertise to use heritage resources for cultural and economic improvement. The Tennessee Century Farms Program, established in 1985 in partnership with the Tennessee Department of Agriculture, is centered on farms that have been in the same family for at least 100 years. Center staff approve applications for the program and manage a Facebook page that is very popular with Century Farm families. The Rural African American Church Project, established in 1997 in partnership with African American heritage groups and the National Trust for Historic Preservation, is an ongoing project that documents the state's historic black churches. Professional services partnerships also reach rural areas through such projects as exhibitions and driving tours.
Heritage education addresses the use of primary sources, including cultural heritage resources, as across-the-disciplines teaching tools in the K-12 grades. Much of this work is accomplished through the center's statewide Teaching with Primary Sources-MTSU program, a partnership with the Library of Congress (library.mtsu.edu/tps). TPS-MTSU works with school systems, community heritage organizations, and higher education teacher-training programs to develop and present materials that meet curriculum standards. Serving educators and students at all levels, TPS-MTSU partners with other MTSU departments and educational institutions throughout the state, such as the Tennessee Historical Society and the East Tennessee History Center. A new partnership with the TPS programs

at Mars Hill University in North Carolina and the University of South Carolina involves a Civil Rights fellowship for Tennessee educators to study that movement in depth.

The Tennessee Civil War National Heritage Area (www.tncivilwar.org/) was created by Congress in 1996. The Heritage Area focuses on the preservation, interpretation, and heritage development of the multiple legacies of the Civil War and Reconstruction in Tennessee. The center is one of the only university units in the nation to serve as the administrative head of a National Heritage Area, which are partnership units of the National Park Service. The Heritage Area provides professional services to institutions, agencies, and property owners across the state and develops funding partnerships with groups, governments, and institutions, which work with the center to establish joint projects and programs of long-lasting benefit to the state and nation. The Heritage Center of Murfreesboro and Rutherford County, located just off the square in Murfreesboro, is a partnership with the Main Street downtown revitalization program. The Heritage Center features a central exhibition on the local Civil War story and serves as a learning laboratory for graduate and undergraduate students, who assist in welcoming visitors, giving downtown walking tours, and creating exhibitions.

Heritage Diversity focuses on incorporating the stories and traditions of all Tennesseans into the history and preservation of the state. Identifying, documenting, and assisting in the interpretation of historic African American schools, cemeteries, farmsteads, businesses, and contributions to the arts are a part of this initiative. National Register documentation of Tennessee, Alabama, and other southern sites associated with the Civil Rights movement are continuing projects. Interpretation and preservation of the Trail of Tears is also a top priority. The center partnered with the National Park Service's National Trails Intermountain Region to complete a comprehensive, nine-state survey to identify and document historic buildings associated with the Trail of Tears National Historic Trail. The report serves as a planning tool for future preservation and interpretation initiatives for the Trail. The center also has a partnership with the National Trails Intermountain Region to survey structures along both the Sante Fe Trail and the Mormon Pioneer Trail and to nominate sites on the El Camino Real de Tierra Adentro Trail to the National Register of Historic Places. Center staff research and write about Tennessee women's history, especially during the Civil War and Reconstruction, and partnered with statewide organizations in the commemoration of the centennial of women suffrage in 2020. Center staff and graduate students recently completed a comprehensive survey of historically black colleges and universities in Alabama.

Civic Engagement includes teaching historic preservation courses each year for the Department of History and directing a number of theses and dissertations. The center hosts graduate assistants from the Ph.D. program in Public History as well as those studying at the M.A. level. Graduate and undergraduate students who work at the center assist staff on a variety of applied research and public service projects, gaining valuable interdisciplinary experiences to supplement their in-class training. In addition, Center Director Dr. Carroll Van West is serving as co-chair of the Tennessee Semiquincentennial Commission of the American Revolution in preparation for the 250th anniversary of the American Revolution in 2026.

The center creates and supports several digital humanities initiatives and has a strong presence on social media. The ***Tennessee Encyclopedia of History and Culture Online Edition*** is a partnership among the center, the Tennessee Historical Society, and the University of Tennessee Press. The encyclopedia Web site is a comprehensive reference for the state's history. ***Southern Places,*** a digital humanities Web site developed by MTSU's Walker Library, highlights the center's fieldwork and documentary projects across the region. ***Trials,Triumphs, and Transformations: Tennesseans Search for Citizenship, Community, and Opportunity*** is a mobile-friendly digital collection originally funded by the Tennessee Board of Regents and features materials that reflect the period between Reconstruction and the end of World War II. ***Landscape of Liberation: The African American Geography of Civil War Tennessee*** is an interactive map created by a partnership between MTSU's Geospatial Research Center and the Tennessee State Library and Archives, with digital research assistance from the center and Walker Library. ***Places, Perspectives: African American Community Building in Tennessee, 1860-1920***, is a mapping tool completed in partnership with the Heritage Area, the Geospatial Research Center, and Walker Library.

Center for Popular Music

The Center for Popular Music (CPM) is an archive and research center devoted to the study of American popular and traditional music in all genres. It was established in 1985 as one of sixteen Centers of Excellence at universities in the Tennessee public higher education system. The center's mission is to promote research and scholarship in popular music and to foster an appreciation of America's diverse musical culture and its global reach. To carry out this

mission, the CPM maintains a large research library and archive, presents public programs that interpret various aspects of American vernacular music, engages in original research projects, and disseminates the results of research through publications in various media. The center also runs a Grammy-winning documentary record label, Spring Fed Records.

The CPM's archive is one of the largest and most important popular music research collections in the world. Materials in the center's collection fall into three broad categories. First are extensive holdings of the various types of media in which music has been fixed and sold as a commodity. These include print materials such as sheet music, song books, song broadsides and songsters, and sound recordings in formats ranging from cylinders to compact discs and digital files. The center's sound archive is one of the largest in the country and consists of more than 250,000 commercial sound recordings as well as many hours of unpublished recordings of music and interviews. The CPM's sheet music collection of approximately 110,000 items is the largest in the Southeast, and its library of gospel songbooks is one of the most extensive of any repository not associated with a religious organization. Second are various materials that are needed to study popular and vernacular music in all its musical, cultural, historical, technological, and commercial contexts, including such items as photographs, posters, playbills, concert programs, trade catalogs, music manuscripts, news clippings, and personal papers of musicians, songwriters, and business people. Third are books, periodicals, and other reference materials about popular music. The center has one of the largest and most comprehensive libraries of books and periodicals about popular music anywhere.

Materials in the center's collection do not circulate but are available to anyone doing research on popular music. Resources support undergraduate, graduate, and faculty research in a variety of disciplines and departments. In keeping with one of the aims of the Centers of Excellence program, the Center for Popular Music serves as a research resource for people far beyond the bounds of the University. Center staff members have fielded research queries from every state in the union and from more than thirty foreign countries. Authors, journalists, performers, media producers, documentary filmmakers, and students writing dissertations have all made use of the center's archive and library.

Public programs sponsored by the center include lectures, conferences, symposia, film screenings, and concerts of contemporary and historical popular music. As part of its public outreach, the center also owns and operates Spring Fed Records, a Grammy-winning documentary record label dedicated to grassroots folk music of the U.S. South. The Spring Fed catalog includes such genres as bluegrass, blues, gospel, and tejano music.

Located on the first floor of the Bragg Media and Entertainment building, the center is open Monday through Friday from 8:30 am to 4:00 pm. The web address is www.mtsu.edu/popmusic.

Student Resources

Career Development Center

The Career Development Center (CDC) is a comprehensive center serving all departments and colleges of MTSU with career exploration, on-campus recruiting, and job searching. For more information, contact the Career Development Center, (615) 898-2500, or visit www.mtsu.edu/career/.

Child Care Lab

The MTSU Child Care Lab provides quality care for children ages 3-5 whose parents are attending or working at MTSU. For more information, contact the Child Care Lab, (615) 898-2970, or visit www.mtsu.edu/childcare/.

Counseling Services

Counseling Services offers crisis intervention, assessment, community referral, and limited personal counseling services, all designed to support students in their emotional, intellectual, and social growth. While they strive to be available to all students needing these services, they assume special responsibility for those in need of immediate assistance. The goal is to understand students' concerns and to develop and implement counseling and referral plans that respond to their needs as effectively and expediently as possible. Counseling Services also coordinates the University's testing program, offering such standardized tests as the CLEP, ACT residual, the PRAXIS series, and others. For more information, contact Counseling Services, (615) 898-2670, or visit www.mtsu.edu/countest.

Disability and Access Center

The Disability and Access Center offers a wide variety of services to students with disabilities, including testing accommodations, providing access to the latest in adaptive computer technologies, and acting as a liaison to University departments. MTSU also provides an ADA/504 coordinator, Lance Alexis, CAB 116, (615) 898-2185. For more information, contact Disability and Access Center, (615) 898-2783, or visit www.mtsu.edu/dac/.

Housing and Residential Life

Housing and Residential Life creates living-learning communities which promote personal and academic growth among a diverse student body. Additional information regarding specific living-learning communities can be found at www.mtsu.edu/living-on-campus/living-learning.php.

Intercultural and Diversity Affairs

Intercultural and Diversity Affairs promotes cultural awareness, understanding, and a sense of belonging for all students at MTSU. For more information, contact Intercultural and Diversity Affairs, (615) 898-5812, or visit www.mtsu.edu/idac/.

June Anderson Center for Women and Nontraditional Students

The June Anderson Center for Women and Nontraditional Students provides student support services conducive to learning and personal development for both women students and for adult students who generally work fulltime, are married, have children, and other adult responsibilities beyond their college experiences. The center provides information and referrals about all aspects of academic and social life. For more information, contact June Anderson Center for Women and Nontraditional Students, (615) 898-5812, or visit www.mtsu.edu/jac/.

Student Health Services

Student Health Services ensures the delivery of affordable, accessible, and high quality health care integrated with the promotion of lifelong wellness for MTSU students. A prepaid student health fee covers the cost of basic office visits, and an on-site Pharmacy provides access to over-the-counter and prescription medication. For more

information about student health services, contact Student Health Services, (615) 898-2988, or visit www.mtsu.edu/healthservices/.

Campus Life

Athletics

Mission:
The Department of Intercollegiate Athletics serves and represents Middle Tennessee State University and its community, while being committed to providing a first class collegiate experience and competing at the highest level. By promoting institutional pride, generating visibility, enhancing campus life, and serving as a connection with alumni and community. It is devoted to serving the best interests of its student-athletes and employs people and administrative staff who embody the highest standards of professionalism, integrity, ethical behavior, and sportsmanship.
Vision:
Prepare student athletes for success through an unparalleled collegiate experience
The MTSU Athletics program strives for excellence in the development of its student-athletes and the quality of its 17 sports teams. The program supports the academic, athletic, and social education of its student-athletes by encouraging them to develop the values of respect for themselves and others and to take pride in achievement and making positive contributions to the communities in which they live.
MTSU is committed to quality athletic programs that bring the campus community together and promote a sense of pride and tradition in academic and athletic excellence. Athletics also brings the University regional and national recognition and provides a link between the University and its alumni and the community at large. It helps generate alumni and public support for all aspects of the University. The athletics program provides quality faculty and leadership to campus programs. It gives students, faculty, and alumni opportunities for innovative public service activities such as the "Reading Raider" program, which has partnered with area elementary schools to promote student reading skills. It uses athletic, financial, and Housing and Residential Life physical resources to maintain and develop athletic programs to accomplish the mission of the University.
The University is a member of Conference USA and the National Collegiate Athletic Association, competing in NCAA Division I in all sports. MTSU is represented annually in baseball, basketball, cross-country, football, golf, tennis, indoor track, and outdoor track for men and by basketball, cross-country, golf, soccer, softball, tennis, indoor track, outdoor track, and volleyball for women.
Both full-time and part-time students are admitted to all home football, basketball, and baseball games by presenting their valid ID cards at the gate. Athletic events in other sports require no admission and are open to the public and campus community. The ticket office is located at Floyd Stadium Gate 1A. Ticket information can be obtained by phoning (615) 898-5261 or visiting GoBlueRaiders.com!
MTSU's Title IX coordinator is Christy Sigler, (615) 898-2185.

Information Technology

The MTSU Information Technology Division (ITD) supports information technology resources of the University. ITD manages the campus network and MTSU's primary academic and administrative computing systems; provides email and telecommunication services for the campus; promotes and supports instructional technology, including faculty consultation and training and maintenance support for all campus technology-based classrooms; administers the University's learning management system, D2L; provides technical support and training for the use of computer hardware and software; provides a seven-day-a-week (hours vary daily) information technology help desk when classes are in session; supports MTSU's primary administrative applications including PipelineMT, Banner, and the data reporting system; and administers the STA (Student Technology Assistant) program, the campus ID system, and the MTSU website.
All MTSU students, staff, and faculty are provided with accounts that provide access to information technology resources as well as Internet access. Students may activate their accounts at www.mtsu.edu/passwords. The account will be ready to use within ten (10) minutes. Faculty and staff accounts are created after job data has been entered into the Banner administrative system. Documentation is sent to the department of the faculty or staff member with login information. Faculty and staff can reset their passwords by going to www.mtsu.edu/passwords.

Parking and Transportation Services

The Parking and Transportation Services Office issues parking permits and enforces parking regulations for the MTSU community.

All students (including part-time, full-time, graduate students, night students, etc.), administrators, faculty, and staff (whether full- or part-time) intending to park a vehicle on campus must obtain a permit through Parking and Transportation Services and place the permit on or in the vehicle being operated on campus. Each individual is responsible for violations received by any vehicle bearing his/her parking permit.

Religious Opportunities

The Philosophy Department offers a major and minor in Religious Studies. In addition, every MTSU student is encouraged to attend worship services of his/her choice. The University seeks neither to promote nor to exclude any creed. Several campus ministries are located in facilities that border the campus.

University Police Department

The University Police Department maintains 24-hour coverage with police patrol and communications operators and assists with the safety and protection of the MTSU community. Services provided include law enforcement, communication of emergency services, building security, escorts, and general assistance to students.

College and University Security Information Act

Pursuant to the provisions of the "College and University Security Information Act," Public Chapter No. 317, enacted by the 1989 General Assembly, Middle Tennessee State University makes available crime rates and statistics as well as security policies and procedures to interested parties. Persons wishing to review or receive a copy of this information, may contact University Police at 1412 East Main Street, Murfreesboro, TN 37132 or by calling (615) 898-2424.

Information to help avoid becoming a victim of crimes such as theft and sexual assault is available in the MTSU Student Handbook and the Police Department Orientation calendar or online at www.mtsu.edu/police/.

College of Basic and Applied Sciences

Computational and Data Science, Ph.D.

John Wallin, Program Director
(615) 494-7735
John.Wallin@mtsu.edu
www.mtsu.edu/COMS

The Ph.D. in Computational and Data Science is an interdisciplinary program in the College of Basic and Applied Sciences and includes faculty from Agriculture, Biology, Chemistry, Computer Science, Engineering Technology, Geosciences, Mathematical Sciences, and Physics and Astronomy. This program is research intensive and applied in nature, seeking to produce graduates with competency in the following three key areas:

1. mastery of the mathematical methods of computation as applied to scientific research investigations coupled with a firm understanding of the underlying fundamental science in at least one disciplinary specialization;
2. deep knowledge of programming languages, scientific programming, and computing technology so that graduates can adapt and grow as computing systems evolve; and
3. skills in effective written and oral communication so that graduates are prepared to assume leadership positions in academia, national labs, and industry.

Admission Requirements

Admission to the Doctor of Philosophy in Computational Science and Data Science program is based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, and letters of recommendation.
Applicants who do not meet these minimums but whose application materials indicate high potential for success may be admitted as non-degree seeking students. Such students must meet the conditions of their admission in the time stated to be fully admitted to the program of study.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
The application deadline is February 15 for those wishing to be considered for graduate assistantships for the following Fall. Late applications may be considered, but space and assistantship availability may be limited.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores for the verbal, quantitative, and analytical writing measures of the GRE that indicate potential for success in the Computational and Data Science program. The GRE is an important measure and is given significant consideration in the admissions review process. Successful applicants typically have Verbal and Quantitative scores at or above the 50th percentile for persons intending graduate study in science with a combined V + Q score exceeding 297;
3. submit official transcripts showing a GPA in previous academic work that indicates potential for success in advanced study. Successful applicants typically have a minimum 3.50 GPA in their graduate work or a minimum 3.00 GPA when entering with a bachelor's degree. Applicants should hold a bachelor's, master's, or doctoral degree in a science discipline;
4. provide letters of recommendation from at least three professors or professionals that address the applicant's potential to successfully complete a Ph.D. in the Computational and Data Science program.
5. submit a one-page statement of background and research interests as part of the application. The statement should include a short summary of experience in mathematics, computer programming, and in science along with the types of problems they hope to work on when they join the program.

Degree Requirements

The Ph.D. in Computational and Data Science requires completion of of 72-96 semester hours.
In order to satisfy the minimum requirements for the degree, students must successfully

1. complete 48 hours of approved graduate core coursework composed of foundation, core, and elective courses;
2. complete 12-24 hours of directed research;
3. complete the qualifying exam before the end of the second year in the program;
4. complete 12-24 hours of dissertation research;
5. make at least two research presentations at regional, national, or international meetings as the lead or coauthor;
6. serve as lead author or make significant contributions of two articles published, in press, or under review in high quality, peer-reviewed journals;
7. make a significant contribution to the development of at least one external grant proposal in collaboration with an MTSU faculty member serving as principal investigator;
8. complete a dissertation, including the final oral defense.

Curriculum: Computational and Data Science

The following illustrates the minimum coursework requirements. In addition, a maximum of 24 hours of directed research and a maximum of 24 hours of dissertation research may be applied to degree requirements.

Foundation Courses (21 hours)

- COMS 6100 - Fundamentals of Computational Science **3 credit hours**
- COMS 6500 - Fundamentals of Scientific Computing **4 credit hours**
- CSCI 6050 - Computer Systems Fundamentals **4 credit hours**
- CSCI 6330 - Parallel Processing Concepts **3 credit hours**
- COMS 7950 - Research Seminar in Computational Science **1 credit hours (total of 3 credits)**
- COMS 7900 - Computational Science Capstone **4 credit hours**

Track (15 hours)

You must take 15 hours from one of these two tracks. Substitutions for particular courses may be approved by your advisor and by the program director.

Computational Science Track

- COMS 7100 - Applied Computational Science **4 credit hours**
- COMS 7300 - Numerical Partial Differential Equations **4 credit hours**
- COMS 7700 - Advanced Concepts in Computational Science **3 or 4 credit hours (4 credits required)**
- COMS 7840 - Selected Topics in the Natural and Applied Sciences **3 credit hours**

Data Science Track

- COMS 7841 - Special Topics in Data Science **3 credit hours**
- CSCI 7350 - Data Mining **3 credit hours**
- CSCI 7400 - Cloud Computing for Data Analysis **3 credit hours**
- CSCI 7850 - Deep Learning **3 credit hours**
- STAT 7400 - Computational Statistics **3 credit hours**

Electives (12 hours)

Electives may come from departmental master's degree programs and the COMS program. They must be at the 6000- or 7000-level.

Directed Research (12-24 hours)

Students must complete 12 hours of directed research before advancement to candidacy. Student may not take more than 6 credit hours of directed research per semester.

Note: ***No more than 24 hours of directed research may be applied toward degree requirements.***

- COMS 7500 - Directed Research in Computational Science **1 to 6 credit hours**

Dissertation (12-24 hours)

Note: ***No more than 24 hours of dissertation research may be applied toward degree requirements.***

- COMS 7640 - Dissertation Research **1 to 6 credit hours**

Program Notes

Applicants holding a master's degree will be expected to have earned at least 21 semester hours of graduate mathematics, science, or engineering credit with evidence of strong mathematical skills and experience in computation through coursework, employment, and/or research experiences. Applicants applying from the baccalaureate level must have an appropriate science degree with evidence of strong mathematical skills and experience in computation through coursework, employment, and/or research experiences.

Students entering with a master's degree in a mathematical, science, or engineering discipline may, on the recommendation of the program coordination committee and with the approval of the graduate dean, have up to 12 credit hours accepted from their master's if it directly corresponds to coursework in the Computational Science curriculum. Students who are interested in pursuing a Master's Degree in Mathematics or Computer Science while pursuing their Ph.D. will need to consult with the program director and the respective departments to understand the additional requirements.

Applicants lacking necessary foundational coursework in previous degrees will be required to complete some remedial courses as part of their program of study in addition to the degree requirements.

Computational Science

COMS 6100 - Fundamentals of Computational Science
3 credit hours Prerequisite: Admission to the Computational Science Ph.D. program or permission of instructor. Foundational overview of the mathematical and scientific underpinnings of computational science. Introduces the principles of finding computer solutions to contemporary science challenges. Offers preparation for core and elective courses in the Ph.D. program in Computational Science by reviewing essential mathematical methods and basic science principles drawn from biology, chemistry, and physics. Special topics include techniques of high performance computing and applications, parallel systems, and theory of computation, case studies in computational chemistry, physics, and mathematical biology.

COMS 6500 - Fundamentals of Scientific Computing
4 credit hours Prerequisite: Graduate standing or permission of instructor. Fundamentals of problem solving approaches in computational science, including computer arithmetic and error analysis, linear and nonlinear equations, least squares, interpolation, numerical differentiation and integration, optimization, random number generations and Monte Carlo simulation. Students will gain computational experience by analyzing case studies using modern software packages such as MATLAB.

COMS 7100 - Applied Computational Science
4 credit hours Prerequisite: Graduate standing or permission of instructor. Intense lecture and practice-based course in computational methods, with a research program offered. Possible topics include computational aspects of linear algebra; contemporary numerical methods (finite difference-based and boundary integral equation-based) for solving initial and boundary value problems for ordinary and partial differential equations arising in engineering, natural sciences, and economics and finance.

COMS 7300 - Numerical Partial Differential Equations
4 credit hours Prerequisite: COMS 6500 or permission of instructor. Numerical methods for solving ordinary and partial differential equations, partial differential integral equations, and stochastic differential equations. Convergence and stability analyses, finite difference methods, finite element methods, mesh-free methods and fast Fourier transform also included.

COMS 7500 - Directed Research in Computational Science
1 to 6 credit hours For Ph.D. students prior to advancement to candidacy. Selection of a research problem, review of pertinent literature, protocol design, collection and analysis of data, and preparation of results for publication. S/U grading.

COMS 7640 - Dissertation Research
1 to 6 credit hours Prerequisite: Advancement to candidacy within the Computational Science Ph.D. program. Involves the student working with their research advisor on any of the aspects of the Ph.D. dissertation from the selection of research problem, a review of the pertinent literature, formulation of a computational approach, data analysis, and composition of the dissertation.

COMS 7654 - Professional Seminar: Topic
1 to 3 credit hours (Same as MSE/MOBI 7654.) Prerequisite: Graduate standing or permission of instructor. Focuses on a specific topic in a given semester. Topics include themes for advancing graduate students professional knowledge such as grant proposal preparation process, making successful presentations, and publishing research in the field. May be repeated with different topic.

COMS 7700 - Advanced Concepts in Computational Science
3 or 4 credit hours Graduate standing or permission of instructor. Advanced topics and protocols specific to different subdivisions of computational science not covered in core or elective courses offered through the program. Students will work under the direct supervision of the instructor. Lecture and/or laboratory components. May be repeated for 6 to 8 credit hours.

COMS 7800 - Teaching Internship
3 credit hours Graduate standing or permission of instructor. Designed for graduate students in Computational Science in order to develop better classroom skills and to build an understanding that good teaching practices can be learned and continuously improved. S/U grading.

COMS 7840 - Selected Topics in the Natural and Applied Sciences
3 credit hours Graduate standing or permission of instructor. Selected topics in the natural and applied sciences for Computational Science students. Provides an opportunity to study applications of computational techniques to real world problems and enhance the domain knowledge of students within the program. Rotating topics may include computational chemistry, computational physics, and computational biology.

COMS 7841 - Special Topics in Data Science
3 credit hours Prerequisite: COMS 6100, CSCI 6050, or permission of instructor. Provides an opportunity for students to study real-world problems and enhance the domain knowledge of students within the data sciences. Topics may include text mining, image classification, pattern recognition, and other topics.

COMS 7900 - Computational Science Capstone
4 credit hours Prerequisites: COMS 6500 and CSCI 6330 or permission of instructor. Requires students to apply advanced computing and mathematics to solve problems in natural and applied sciences. Students expected to apply parallel computing, advanced simulation and data mining techniques to solve a research problem in collaboration with advisor. Course co-taught by two faculty members from different departments. Final presentations open to students, faculty, and visitors.

COMS 7950 - Research Seminar in Computational Science
1 credit hours Prerequisite: Admission to the Computational Science Ph.D. program or permission of instructor. Seminar course to build a broader understanding of problems and research topics in computational science through advanced reading of selected journal articles, group discussion, and presentations by both external and internal speakers in computational science.

Data Science Certificate

Qiang Wu, Program Director
(615) 898-2053
Qiang.Wu@mtsu.edu

The curriculum of the certificate program in Data Science is designed to provide students a realistic idea of the work of a data scientist. After successful completion of an introductory course, students will work with predictive modeling and data exploration. Program is designed for completion within two semesters.

Admission Requirements

Admission to the Data Science certificate program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average in all college work taken.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.

Certificate Requirements

Candidate must maintain a cumulative grade point average of 3.0 in courses leading to the certificate.

Curriculum: Data Science

Required Courses (12 hours)

- DATA 6300 - Data Understanding **3 credit hours**
- DATA 6310 - Data Exploration **3 credit hours**
- DATA 6320 - Predictive Modeling **3 credit hours**
- DATA 6330 - Model Optimization and Deployment **3 credit hours**

Data Science

DATA 6300 - Data Understanding
3 credit hours Applications used to understand the problem-solving process for data science. Data collection and cleansing techniques used to visualize and summarize the data in order to prepare it for modeling for various data types through statistical analysis with Python programming.

DATA 6310 - Data Exploration
3 credit hours Prerequisite: DATA 6300. Data science techniques to explore numerical and text data. Unsupervised learning and NLP applications used to explore data to understand its impact and use to make data-driven decisions.

DATA 6320 - Predictive Modeling
3 credit hours Prerequisite: DATA 6300. Develop models to predict outcomes through the use of supervised learning techniques. Applications in regression and classification modeling used to develop data driven problem solving to predict and support decisions and analysis.

DATA 6330 - Model Optimization and Deployment
3 credit hours Prerequisites: DATA 6310 and DATA 6320. The optimization and deployment of machine learning models. Techniques for fine-tuning parameters for developing the best model for the presented business problems. Applications through internal and cloud infrastructures also used to identify optimal techniques for deployment of models to operationalize into production.

DATA 6500 - Cases in Data Science
3 credit hours Prerequisite: DATA 6320 with C (2.0) or better. Cases that integrate innovative data science techniques from various real-world problems and scenarios. Topics may include supervised and unsupervised learning, NLP, databases, SQL, NoSQL, cloud computing, and data ethics.

DATA 6700 - Independent Study in Data Science
1 to 3 credit hours Prerequisite: DATA 6300 with C (2.0) or better. Assigned research or projects in the data science discipline under direct faculty supervision. Topics for intensive study chosen in joint consultation between student and instructor.

DATA 6990 - Topics Seminar in Data Science
3 credit hours Prerequisite: DATA 6500 with C (2.0) or better. Application of various data science skills with an emphasis on full-scale projects and oral presentations from initial business and data understanding, data cleansing, modeling and analysis, findings, and deployment.

Mathematics and Science Education, Biological Education Concentration, Ph.D.

Jennifer Kaplan, Program Director
Jennifer.Kaplan@mtsu.edu

The Mathematics and Science Education (MSE) Ph.D. program is an interdisciplinary program designed to train ***academic researchers*** and ***educational professionals*** to carry out, evaluate, and integrate research in mathematics or science education. The interdisciplinary nature of the program is manifested in two ways. First, similar to other STEM education Ph.D. programs, the MSE program requires students to develop content mastery of mathematics or science and demonstrate an understanding of educational theories, research methodologies, and best practices in mathematics or science education. Thus, graduates are scholars who work at the intersection of a mathematical or scientific domain and education. Second, and unique to the MTSU MSE program is the requirement that students can compare and contrast the nature of knowledge and how knowledge is created and taught or learned across mathematics and scientific disciplines, creating scholars who can work collaboratively with other mathematical and/or science education researchers. We offer preparation for students to serve in faculty positions or leadership roles in mathematics and science education at the undergraduate level or in K-12 settings, including work with in-service and pre-service teachers.

Depending on research and professional interests, graduates of the program may choose to

- conduct research about how people learn the concepts, practices, and ways of thinking in mathematics or science;
- conduct research about the nature and development of expertise in mathematics or a scientific discipline;
- identify approaches to make mathematics or science education broad and inclusive;
- identify and measure appropriate learning objectives and instructional approaches in mathematics or science that advance students toward those objectives;
- conduct or use research to support the professional development of K-16 mathematics or science teachers or instructors;
- conduct or use research or enact policy to improve K-16 mathematics or science education;
- teach disciplinary content or methods courses for pre-service teachers.

All students in the Mathematics and Science Education Ph.D. program will be expected to complete the residency requirement during the first year of enrollment in the program. Please see **Residency Requirement** (below) for more information.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission is based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, and letters of recommendation.

Admission requires

1. an earned bachelor's or master's degree from an accredited university or college. Applicants holding only a bachelor's degree will be expected to have earned that degree in an area of mathematics or science and will be expected to earn a master's degree in science, mathematics, or education as they complete the requirements of the Ph.D. All applicants to this program will either possess a mathematics or science degree upon admission or will be required to earn a content master's as a part of their program of study.
2. an acceptable grade point average (GPA). Successful applicants typically have a minimum 3.25 GPA in their most recent graduate work or a minimum 3.00 GPA when entering with a bachelor's degree. Applicants holding a master's degree should have earned at least 24 semester hours of graduate mathematics, science, and/or education credit.

Application Procedures

Applicants must submit all application materials to the College of Graduate Studies.

Application deadline: January 15 for full consideration for graduate assistantships in the following Fall semester. Assistantships may be limited for applications that are completed after January 15.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts showing a grade point average (GPA) in previous academic work that indicates potential for success in advanced study;
3. submit official scores for the verbal, quantitative, and analytical writing measures of the GRE that indicate potential for success in the Mathematics and Science Education program. Although specific minimum scores are not set, evaluation of scores is an important factor in admission decisions.
4. submit supplemental application;
5. provide letters of recommendation from at least three professors or professionals that address the applicant's potential to successfully complete a Ph.D. in Mathematics and Science Education.

NOTE: ***International students must also meet the College of Graduate Studies requirement for proof of English language proficiency. This may be accomplished by submission of TOEFL, UMELI test, or IELTS scores that meet the college's requirements or by successful completion of level 112 of ELS coursework.***

Applicants who do not meet these minimums but whose application materials indicate high potential for success may be admitted as non-degree seeking. Such students must meet the conditions of their admission in the time stated to be fully admitted to the program of study.

Degree Requirements

The Ph.D. in Mathematics and Science Education with a concentration in Biological Education requires completion of a minimum of 60 semester hours.

Once admitted to the program, each candidate must

1. complete at least 60 post-baccalaureate semester hours as described in the Curriculum section below. (Students entering with a master's degree in mathematics, education, or a science discipline may have up to 15 graduate hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the Mathematics and Science Education curriculum.)
2. make at least two research presentations at regional, national, or international meetings as the lead or coauthor;
3. be lead author or make significant contribution as coauthor of two articles published, in press, or under review in high quality, peer-reviewed journals;
4. in collaboration with an MTSU faculty member serving as principal investigator, make a significant contribution to the development of at least one external grant proposal;
5. complete the MSE 7800 - Teaching Internship;
6. complete a dissertation and successfully defend it in the final oral examination.

Residency Requirement

During the residency year, students are expected to complete at least 16 hours of coursework that apply directly to the degree. Of these 16 hours, 13 hours of coursework are prescribed.

Fall Semester (5 hours)

- MSE 7001 Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- SPSE 7010 Educational Research Methodology OR SPSE 7270 Learning Theories in Mathematics and Science Education **3 credit hours**

Spring Semester (5 hours)

- MSE 7002 Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**

- SPSE 7180 Qualitative Evaluation and Research Methods OR MSE 7900 The Nature of Mathematics, Science, and STEM **3 credit hours**

Summer (3 hours)

- MSE 7900 The Nature of Mathematics, Science, and STEM OR BIOL 7900 Teaching and Learning Biology/CHEM 7900 Teaching and Learning in Chemistry OR MATH 7320 Mathematical Problem Solving **3 credit hours**

In addition, during the residency year, students are expected to complete each of the following:

1. **Attend at least one conference**: The conference should be directly related to the student's concentration (i.e,. biology education, chemistry education, science education, mathematics education) and should be at the regional, national, or international level. The advisor must approve the selected conference.
2. **Make significant progress* toward the submission of a manuscript on which the student is a co-author.** The manuscript will be prepared under the guidance of or in conjunction with MSE faculty. Residency seminars will support this process.
3. **Attend at least five (5) program activities not associated with course credit**: The MSE program has numerous activities that occur during the academic year (i.e., fall and spring semesters). These include seminars, book club meetings, reading/writing groups, journal clubs, etc. Some of these are intended for all MSE students while others are specific to concentrations.

***NOTE:** Significant progress toward the submission of a manuscript is defined as legitimate peripheral participation of the student within one or more of the following components of a manuscript:

- Research rationale/study introduction
- Literature review
- Research design and methodology
- Data analysis data presentation
- Writing

Curriculum: Mathematics and Science Education, Biological Education

The following illustrates the minimum coursework requirements. In addition, a maximum of 36 hours of dissertation research may be required to fulfill degree requirements.

Core Courses (27 hours)

- MSE 7001 - Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- MSE 7002 - Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**
- MSE 7800 - Teaching Internship **3 credit hours**
- MSE 7820 - Research Seminar in Mathematics and Science Education **1 credit hours**
  NOTE: Students are required to take MSE 7820 at least twice before candidacy.
- MSE 7900 - The Nature of Mathematics, Science, and STEM **3 credit hours**
- MSE 7310 - Theoretical Frameworks in Mathematics and Science Education **3 credit hours**
- SPSE 7010 - Educational Research Methodology **3 credit hours**
- SPSE 7180 - Qualitative Evaluation and Research Methods **3 credit hours**
- SPSE 7270 - Learning Theories in Mathematics and Science Education **3 credit hours**

- ALSI 7600 - Educational Statistics **3 credit hours** OR
- ALSI 7620 - Advanced Quantitative Research Methodologies **3 credit hours** OR
- PSY 7280 - Psychological Statistics: Regression **3 credit hours** OR
- PSY 7460 - Factor Analysis and Related Methods **3 credit hours** OR
- PSY 7550 - Structural Equation Modeling **3 credit hours** OR
- PSY 7565 - Behavioral Statistics Using R **3 credit hours**

Concentration Core (18 hours)

- BIOL 7900 - Teaching and Learning Biology **3 credit hours**

Choose 15 hours from the following:

- BIOL 6070 - Plants and Man **3 credit hours**
- BIOL 6080 - Advanced Mycology **4 credit hours**
- BIOL 6081 - Advanced Mycology Lab **0 credit hours**
- BIOL 6090 - Advanced Forest Ecology **4 credit hours**
- BIOL 6120 - Aquatic Ecology **3 credit hours**
- BIOL 6130 - Ornithology **3 credit hours**
- BIOL 6131 - Ornithology Lab **0 credit hours**
- BIOL 6180 - Mammalogy **3 credit hours**
- BIOL 6181 - Mammalogy Lab **0 credit hours**
- BIOL 6190 - Animal Physiological Ecology **4 credit hours**
- BIOL 6200 - Speciation **3 credit hours**
- BIOL 6210 - Protozoology **3 credit hours**
- BIOL 6211 - Protozoology Lab **0 credit hours**
- BIOL 6220 - Herpetology **3 credit hours**
- BIOL 6221 - Herpetology Lab **0 credit hours**
- BIOL 6250 - Genomics **3 credit hours**
- BIOL 6270 - Cell Metabolism and Human Disease **3 credit hours**
- BIOL 6290 - Advanced Scanning Electron Microscopy **4 credit hours**
- BIOL 6350 - Biostatistical Analysis **4 credit hours**
- BIOL 6351 - Biostatistical Analysis Lab **0 credit hours**
- BIOL 6360 - Energy Dispersive X-Ray Theory and Analysis **1 credit hours**
- BIOL 6380 - Experimental Immunology **4 credit hours**
- BIOL 6381 - Experimental Immunology Lab **0 credit hours**
- BIOL 6390 - Advanced Cell and Molecular Biology **3 credit hours**
- BIOL 6391 - Advanced Cell and Molecular Biology Lab **0 credit hours**
- BIOL 6410 - Advanced Transmitting Electron Microscopy **4 credit hours**
- BIOL 6430 - Clinical and Pathogenic Microbiology **4 credit hours**
- BIOL 6440 - Advanced Virology **4 credit hours**
- BIOL 6450 - Advancements in Molecular Genetics **4 credit hours**
- BIOL 6460 - Conservation Biology **4 credit hours**
- BIOL 6590 - Environmental Toxicology **4 credit hours**
- BIOL 6700 - Plant-Animal Interactions **3 credit hours**
- BIOL 6720 - Advanced Animal Development **4 credit hours**
- BIOL 6730 - Advanced Microbial Physiology and Biochemistry **4 credit hours**
- BIOL 6740 - Brain Development and Learning Disabilities **1 credit hours**
- BIOL 6750 - Advanced Plant Biotechnology **4 credit hours**
- BIOL 6760 - Bioinformatics **4 credit hours**

- BIOL 6770 - Issues in Biotechnology **2 credit hours**
- BIOL 6780 - Principles of Systematics **4 credit hours**
- BIOL 7010 - Analysis of Genetic Markers **4 credit hours**
- BIOL 7250 - Genomics **3 credit hours**
- BIOL 7270 - Cell Metabolism and Human Disease **3 credit hours**

Electives (3-36 hours)

In consultation with his or her major advisor and dissertation committee, each student will choose 3-36 credit hours from courses in the College of Basic and Applied Sciences, College of Behavioral and Health Sciences, and the College of Education at the 6000 or 7000 level.
Students in the Biological Education concentration should select their electives to ensure that they have completed at least 21 hours of coursework with a BIOL rubric, or the equivalent as determined by the student's advisor.

Dissertation (12-36 hours)

- MSE 7640 - Dissertation Research in Mathematics and Science Education **1 to 6 credit hours**

Mathematics and Science Education, Chemical Education Concentration, Ph.D.

Jennifer Kaplan, Program Director
Jennifer.Kaplan@mtsu.edu

The Mathematics and Science Education (MSE) Ph.D. program is an interdisciplinary program designed to train ***academic researchers*** and ***educational professionals*** to carry out, evaluate, and integrate research in mathematics or science education. The interdisciplinary nature of the program is manifested in two ways. First, similar to other STEM education Ph.D. programs, the MSE program requires students to develop content mastery of mathematics or science and demonstrate an understanding of educational theories, research methodologies, and best practices in mathematics or science education. Thus, graduates are scholars who work at the intersection of a mathematical or scientific domain and education. Second, and unique to the MTSU MSE program is the requirement that students can compare and contrast the nature of knowledge and how knowledge is created and taught or learned across mathematics and scientific disciplines, creating scholars who can work collaboratively with other mathematical and/or science education researchers. We offer preparation for students to serve in faculty positions or leadership roles in mathematics and science education at the undergraduate level or in K-12 settings, including work with in-service and pre-service teachers.

Depending on research and professional interests, graduates of the program may choose to

- conduct research about how people learn the concepts, practices, and ways of thinking in mathematics or science;
- conduct research about the nature and development of expertise in mathematics or a scientific discipline;
- identify approaches to make mathematics or science education broad and inclusive;
- identify and measure appropriate learning objectives and instructional approaches in mathematics or science that advance students toward those objectives;
- conduct or use research to support the professional development of K-16 mathematics or science teachers or instructors;
- conduct or use research or enact policy to improve K-16 mathematics or science education;
- teach disciplinary content or methods courses for pre-service teachers.

All students in the Mathematics and Science Education Ph.D. program will be expected to complete the residency requirement during the first year of enrollment in the program. Please see **Residency Requirement** (below) for more information.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission is based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, and letters of recommendation.

Admission requires

1. an earned bachelor's or master's degree from an accredited university or college. Applicants holding only a bachelor's degree will be expected to have earned that degree in an area of mathematics or science and will be expected to earn a master's degree in science, mathematics, or education as they complete the requirements of the Ph.D. All applicants to this program will either possess a mathematics or science degree upon admission or will be required to earn a content master's as a part of their program of study.
2. an acceptable grade point average (GPA). Successful applicants typically have a minimum 3.25 GPA in their most recent graduate work or a minimum 3.00 GPA when entering with a bachelor's degree. Applicants holding a master's degree should have earned at least 24 semester hours of graduate mathematics, science, and/or education credit.

Application Procedures

Applicants must submit all application materials to the College of Graduate Studies.

Application deadline: January 15 for full consideration for graduate assistantships in the following Fall semester. Assistantships may be limited for applications that are completed after January 15.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts showing a grade point average (GPA) in previous academic work that indicates potential for success in advanced study;
3. submit official scores for the verbal, quantitative, and analytical writing measures of the GRE that indicate potential for success in the Mathematics and Science Education program. Although specific minimum scores are not set, evaluation of scores is an important factor in admission decisions.
4. submit supplemental application;
5. provide letters of recommendation from at least three professors or professionals that address the applicant's potential to successfully complete a Ph.D. in Mathematics and Science Education.

NOTE: ***International students must also meet the College of Graduate Studies requirement for proof of English language proficiency. This may be accomplished by submission of TOEFL, UMELI test, or IELTS scores that meet the college's requirements or by successful completion of level 112 of ELS coursework.***

Applicants who do not meet these minimums but whose application materials indicate high potential for success may be admitted as non-degree seeking. Such students must meet the conditions of their admission in the time stated to be fully admitted in the program of study.

Degree Requirements

The Ph.D. in Mathematics and Science Education with a concentration in Chemical Education requires completion of a minimum of 60 semester hours.

Once admitted to the program, each candidate must

1. complete at least 60 post-baccalaureate semester hours as described in the Curriculum section below. (Students entering with a master's degree in mathematics, education, or a science discipline may have up to 15 graduate hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the Mathematics and Science Education curriculum.)
2. make at least two research presentations at regional, national, or international meetings as the lead or coauthor.
3. be lead author or make significant contribution as coauthor of two articles published, in press, or under review in high quality, peer-reviewed journals.
4. in collaboration with an MTSU faculty member serving as principal investigator, make a significant contribution to the development of at least one external grant proposal.
5. complete the MSE 7800 - Teaching Internship. Those who lack teaching experience in the K-12 setting are required to complete MSE 7800 in a K-12 teaching experience.
6. complete a dissertation and successfully defend it in the final oral examination.

Residency Requirement

During the residency year, students are expected to complete at least 16 hours of coursework that apply directly to the degree. Of these 16 hours, 13 hours of coursework are prescribed.

Fall Semester (5 hours)

- MSE 7001 Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- SPSE 7010 Educational Research Methodology OR SPSE 7270 Learning Theories in Mathematics and Science Education **3 credit hours**

Spring Semester (5 hours)

- MSE 7002 Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**

- SPSE 7180 Qualitative Evaluation and Research Methods OR MSE 7900 The Nature of Mathematics, Science, and STEM **3 credit hours**

Summer (3 hours)

- MSE 7900 The Nature of Mathematics, Science, and STEM OR BIOL 7900 Teaching and Learning Biology/CHEM 7900 Teaching and Learning in Chemistry OR MATH 7320 Mathematical Problem Solving **3 credit hours**

In addition, during the residency year, students are expected to complete each of the following:

1. **Attend at least one conference**: The conference should be directly related to the student's concentration (i.e,. biology education, chemistry education, science education, mathematics education) and should be at the regional, national, or international level. The advisor must approve the selected conference.
2. **Make significant progress* toward the submission of a manuscript on which the student is a co-author.** The manuscript will be prepared under the guidance of or in conjunction with MSE faculty. Residency seminars will support this process.
3. **Attend at least five (5) program activities not associated with course credit**: The MSE program has numerous activities that occur during the academic year (i.e., fall and spring semesters). These include seminars, book club meetings, reading/writing groups, journal clubs, etc. Some of these are intended for all MSE students while others are specific to concentrations.

***NOTE:** Significant progress toward the submission of a manuscript is defined as legitimate peripheral participation of the student within one or more of the following components of a manuscript:

- Research rationale/study introduction
- Literature review
- Research design and methodology
- Data analysis data presentation
- Writing

Curriculum: Mathematics and Science Education, Chemical Education

The following illustrates the minimum coursework requirements. In addition, a maximum of 36 hours of dissertation research may be required to fulfill degree requirements.

Required Core Courses (27 hours)

- MSE 7001 - Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- MSE 7002 - Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**
- MSE 7310 - Theoretical Frameworks in Mathematics and Science Education **3 credit hours**
- MSE 7800 - Teaching Internship **3 credit hours**
- MSE 7820 - Research Seminar in Mathematics and Science Education **1 credit hours**
  NOTE: Students are required to take MSE 7820 at least twice before candidacy.
- MSE 7900 - The Nature of Mathematics, Science, and STEM **3 credit hours**
- SPSE 7010 - Educational Research Methodology **3 credit hours**
- SPSE 7180 - Qualitative Evaluation and Research Methods **3 credit hours**
- SPSE 7270 - Learning Theories in Mathematics and Science Education **3 credit hours**

Choose one from the following:

- ALSI 7600 - Educational Statistics **3 credit hours**
- ALSI 7620 - Advanced Quantitative Research Methodologies **3 credit hours**
- PSY 7280 - Psychological Statistics: Regression **3 credit hours**
- PSY 7460 - Factor Analysis and Related Methods **3 credit hours**
- PSY 7550 - Structural Equation Modeling **3 credit hours**
- PSY 7565 - Behavioral Statistics Using R **3 credit hours**

Concentration Core (19 hours)

- CHEM 6100 - Intermediate Organic Chemistry **3 credit hours**
- CHEM 6230 - Intermediate Analytical Chemistry **4 credit hours**
- CHEM 6300 - Intermediate Physical Chemistry **3 credit hours**
- CHEM 6400 - Intermediate Inorganic Chemistry **3 credit hours**
- CHEM 6500 - Biochemistry I **3 credit hours**
- CHEM 7900 - Teaching and Learning in Chemistry **3 credit hours**

Electives (2-35 hours)

In consultation with his or her major advisor and dissertation committee, each student will choose 2-35 credit hours from courses in the College of Basic and Applied Sciences, College of Behavioral and Health Sciences, and the College of Education at the 6000 or 7000 level.
Students in the Chemical Education concentration should select their electives to ensure that they have completed at least 21 hours with a CHEM rubric or the equivalent as determined by the students advisor.

Dissertation (12-36 hours)

- MSE 7640 - Dissertation Research in Mathematics and Science Education **1 to 6 credit hours**

Mathematics and Science Education, Interdisciplinary Science Education Concentration, Ph.D.

Jennifer Kaplan, Program Director
Jennifer.Kaplan@mtsu.edu

The Mathematics and Science Education (MSE) Ph.D. program is an interdisciplinary program designed to train ***academic researchers*** and ***educational professionals*** to carry out, evaluate, and integrate research in mathematics or science education. The interdisciplinary nature of the program is manifested in two ways. First, similar to other STEM education Ph.D. programs, the MSE program requires students to develop content mastery of mathematics or science and demonstrate an understanding of educational theories, research methodologies, and best practices in mathematics or science education. Thus, graduates are scholars who work at the intersection of a mathematical or scientific domain and education. Second, and unique to the MTSU MSE program is the requirement that students can compare and contrast the nature of knowledge and how knowledge is created and taught or learned across mathematics and scientific disciplines, creating scholars who can work collaboratively with other mathematical and/or science education researchers. We offer preparation for students to serve in faculty positions or leadership roles in mathematics and science education at the undergraduate level or in K-12 settings, including work with in-service and pre-service teachers.

Depending on research and professional interests, graduates of the program may choose to

- conduct research about how people learn the concepts, practices, and ways of thinking in mathematics or science;
- conduct research about the nature and development of expertise in mathematics or a scientific discipline;
- identify approaches to make mathematics or science education broad and inclusive;
- identify and measure appropriate learning objectives and instructional approaches in mathematics or science that advance students toward those objectives;
- conduct or use research to support the professional development of K-16 mathematics or science teachers or instructors;
- conduct or use research or enact policy to improve K-16 mathematics or science education;
- teach disciplinary content or methods courses for pre-service teachers.

All students in the Mathematics and Science Education Ph.D. program will be expected to complete the residency requirement during the first year of enrollment in the program. Please see **Residency Requirement** (below) for more information.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission is based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, and letters of recommendation.

Admission requires

1. an earned bachelor's or master's degree from an accredited university or college. Applicants holding only a bachelor's degree will be expected to have earned that degree in an area of mathematics or science and will be expected to earn a master's degree in science, mathematics, or education as they complete the requirements of the Ph.D. All applicants to this program will either possess a mathematics or science degree upon admission or will be required to earn a content master's as a part of their program of study.
2. an acceptable grade point average (GPA). Successful applicants typically have a minimum 3.25 GPA in their most recent graduate work or a minimum 3.00 GPA when entering with a bachelor's degree. Applicants holding a master's degree should have earned at least 24 semester hours of graduate mathematics, science, and/or education credit.

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NOTE: ***International students must also meet the College of Graduate Studies requirement for proof of English language proficiency. This may be accomplished by submission of TOEFL, UMELI test, or IELTS scores that meet the college's requirements or by successful completion of level 112 of ELS coursework.***

Applicants who do not meet these minimums but whose application materials indicate high potential for success may be admitted as non-degree seeking. Such students must meet the conditions of their admission in the time stated to be fully admitted to the program of study.

Degree Requirements

The Ph.D. in Mathematics and Science Education with a concentration in Interdisciplinary Science Education requires completion of a minimum of 60 semester hours.

Once admitted to the program, each candidate must

1. complete at least 60 post-baccalaureate semester hours as described in the Curriculum section below. (Students entering with a master's degree in mathematics, education, or a science discipline may have up to 15 graduate hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the Mathematics and Science Education curriculum.)
2. make at least two research presentations at regional, national, or international meetings as the lead or coauthor;
3. be lead author or make significant contribution as coauthor of two articles published, in press, or under review in high quality, peer-reviewed journals;
4. in collaboration with an MTSU faculty member serving as principal investigator, make a significant contribution to the development of at least one external grant proposal;
5. complete the MSE 7800 - Teaching Internship;
6. complete a dissertation and successfully defend it in the final oral examination.

Residency Requirement

During the residency year, students are expected to complete at least 16 hours of coursework that apply directly to the degree. Of these 16 hours, 13 hours of coursework are prescribed.

Fall Semester (5 hours)

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Spring Semester (5 hours)

- MSE 7002 Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**

- SPSE 7180 Qualitative Evaluation and Research Methods OR MSE 7900 The Nature of Mathematics, Science, and STEM **3 credit hours**

Summer (3 hours)

- MSE 7900 The Nature of Mathematics, Science, and STEM OR BIOL 7900 Teaching and Learning Biology/CHEM 7900 Teaching and Learning in Chemistry OR MATH 7320 Mathematical Problem Solving **3 credit hours**

In addition, during the residency year, students are expected to complete each of the following:

1. **Attend at least one conference**: The conference should be directly related to the student's concentration (i.e,. biology education, chemistry education, science education, mathematics education) and should be at the regional, national, or international level. The advisor must approve the selected conference.
2. **Make significant progress* toward the submission of a manuscript on which the student is a co-author.** The manuscript will be prepared under the guidance of or in conjunction with MSE faculty. Residency seminars will support this process.
3. **Attend at least five (5) program activities not associated with course credit**: The MSE program has numerous activities that occur during the academic year (i.e., fall and spring semesters). These include seminars, book club meetings, reading/writing groups, journal clubs, etc. Some of these are intended for all MSE students while others are specific to concentrations.

***NOTE:** Significant progress toward the submission of a manuscript is defined as legitimate peripheral participation of the student within one or more of the following components of a manuscript:

- Research rationale/study introduction
- Literature review
- Research design and methodology
- Data analysis data presentation
- Writing

Curriculum: Mathematics and Science Education, Interdisciplinary Science Education

The following illustrates the minimum coursework requirements. In addition, a maximum of 36 hours of dissertation research may be required to fulfill degree requirements.

Core Courses (27 hours)

- MSE 7001 - Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- MSE 7002 - Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**
- MSE 7310 - Theoretical Frameworks in Mathematics and Science Education **3 credit hours**
- MSE 7800 - Teaching Internship **3 credit hours**
- MSE 7820 - Research Seminar in Mathematics and Science Education **1 credit hours**
  NOTE: Students are required to take MSE 7820 at least twice before candidacy.
- MSE 7900 - The Nature of Mathematics, Science, and STEM **3 credit hours**
- SPSE 7010 - Educational Research Methodology **3 credit hours**
- SPSE 7180 - Qualitative Evaluation and Research Methods **3 credit hours**
- SPSE 7270 - Learning Theories in Mathematics and Science Education **3 credit hours**

Choose one of the following:

- ALSI 7600 - Educational Statistics **3 credit hours** OR
- ALSI 7620 - Advanced Quantitative Research Methodologies **3 credit hours** OR
- PSY 7280 - Psychological Statistics: Regression **3 credit hours** OR
- PSY 7460 - Factor Analysis and Related Methods **3 credit hours** OR
- PSY 7550 - Structural Equation Modeling **3 credit hours** OR
- PSY 7565 - Behavioral Statistics Using R **3 credit hours**

Concentration Core (18 hours)

Students who choose this concentration must select at least 18 hours (in consultation with their major advisors and dissertation committee) from the courses listed in the Biological Education, Chemical Education, and Mathematics Education concentrations in Mathematics and Science Education or from the courses listed below:

- BIOL 7850 - Intermediate Life Science **3 credit hours**
- MATH 6100 - Mathematics for Teachers **3 credit hours**
- MATH 6330 - Algebra from an Advanced Perspective **3 credit hours**
- MATH 6340 - Geometry from an Advanced Perspective **3 credit hours**
- MATH 6350 - Probability and Statistics from an Advanced Perspective **3 credit hours**
- PSCI 6020 - Investigations in Physical Science **1 to 3 credit hours**
- PSY 6480 - Advanced Topics in Quantitative Psychology **3 credit hours**
- PSY 6550 - Structural Equation Modeling **3 credit hours**
- PSY 7210 - Advanced Psychometrics **3 credit hours**
- PSY 7580 - Multivariate Data Analysis **3 credit hours**
- PSCI 7800 - Intermediate Physical Science **3 credit hours**

Students must take one of the following courses:

- BIOL 7900 - Teaching and Learning Biology **3 credit hours**
- CHEM 7900 - Teaching and Learning in Chemistry **3 credit hours**
- MATH 7900 - Teaching and Learning Mathematics **3 credit hours**

Electives (3-36 hours)

In consultation with his or her major advisor and dissertation committee, each student will choose 3-36 credit hours from courses in the College of Basic and Applied Sciences, College of Behavioral and Health Sciences, and the College of Education at the 6000 or 7000 level.

Dissertation (12-36 hours)

- MSE 7640 - Dissertation Research in Mathematics and Science Education **1 to 6 credit hours**

Mathematics and Science Education, Mathematics Education Concentration, Ph.D.

Jennifer Kaplan, Program Director
Jennifer.Kaplan@mtsu.edu

The Mathematics and Science Education (MSE) Ph.D. program is an interdisciplinary program designed to train ***academic researchers*** and ***educational professionals*** to carry out, evaluate, and integrate research in mathematics or science education. The interdisciplinary nature of the program is manifested in two ways. First, similar to other STEM education Ph.D. programs, the MSE program requires students to develop content mastery of mathematics or science and demonstrate an understanding of educational theories, research methodologies, and best practices in mathematics or science education. Thus, graduates are scholars who work at the intersection of a mathematical or scientific domain and education. Second, and unique to the MTSU MSE program is the requirement that students can compare and contrast the nature of knowledge and how knowledge is created and taught or learned across mathematics and scientific disciplines, creating scholars who can work collaboratively with other mathematical and/or science education researchers. We offer preparation for students to serve in faculty positions or leadership roles in mathematics and science education at the undergraduate level or in K-12 settings, including work with in-service and pre-service teachers.

Depending on research and professional interests, graduates of the program may choose to

- conduct research about how people learn the concepts, practices, and ways of thinking in mathematics or science;
- conduct research about the nature and development of expertise in mathematics or a scientific discipline;
- identify approaches to make mathematics or science education broad and inclusive;
- identify and measure appropriate learning objectives and instructional approaches in mathematics or science that advance students toward those objectives;
- conduct or use research to support the professional development of K-16 mathematics or science teachers or instructors;
- conduct or use research or enact policy to improve K-16 mathematics or science education;
- teach disciplinary content or methods courses for pre-service teachers.

All students in the Mathematics and Science Education Ph.D. program will be expected to complete the residency requirement during the first year of enrollment in the program. Please see **Residency Requirement** (below) for more information.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission is based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, and letters of recommendation.

Admission requires

1. an earned bachelor's or master's degree from an accredited university or college. Applicants holding only a bachelor's degree will be expected to have earned that degree in an area of mathematics or science and will be expected to earn a master's degree in science, mathematics, or education as they complete the requirements of the Ph.D. All applicants to this program will either possess a mathematics or science degree upon admission or will be required to earn a content master's as a part of their program of study.
2. an acceptable grade point average (GPA). Successful applicants typically have a minimum 3.25 GPA in their most recent graduate work or a minimum 3.00 GPA when entering with a bachelor's degree. Applicants holding a master's degree should have earned at least 24 semester hours of graduate mathematics, science, and/or education credit.

Application Procedures

Applicants must submit all application materials to the College of Graduate Studies.

Application deadline: January 15 for full consideration for graduate assistantships in the following Fall semester. Assistantships may be limited for applications that are completed after January 15.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts showing a grade point average (GPA) in previous academic work that indicates potential for success in advanced study;
3. submit official scores for the verbal, quantitative, and analytical writing measures of the GRE that indicate potential for success in the Mathematics and Science Education program. Although specific minimum scores are not set, evaluation of scores is an important factor in admission decisions.
4. submit supplemental application;
5. provide letters of recommendation from at least three professors or professionals that address the applicant's potential to successfully complete a Ph.D. in Mathematics and Science Education.

NOTE*: International students must also meet the College of Graduate Studies requirement for proof of English language proficiency. This may be accomplished by submission of TOEFL, UMELI test, or IELTS scores that meet the college's requirements or by successful completion of level 112 of ELS coursework.*

Applicants who do not meet these minimums but whose application materials indicate high potential for success may be admitted as non-degree seeking. Such students must meet the conditions of their admission in the time stated to be fully admitted to program of study.

Degree Requirements

The Ph.D. in Mathematics and Science Education with a concentration in Mathematics Education requires completion of a minimum of 69 semester hours.

Once admitted to the program, each candidate must

1. complete at least 69 post-baccalaureate semester hours as described in the Curriculum section below. (Students entering with a master's degree in mathematics, education, or a science discipline may have up to 15 graduate hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the Mathematics and Science Education curriculum.)
2. make at least two research presentations at regional, national, or international meetings as the lead or coauthor;
3. be lead author or make significant contribution as coauthor of two articles published, in press, or under review in high quality, peer-reviewed journals;
4. in collaboration with an MTSU faculty member serving as principal investigator, make a significant contribution to the development of at least one external grant proposal;
5. complete the MSE 7800 - Teaching Internship;
6. complete a dissertation and successfully defend it in the final oral examination.

Residency Requirement

During the residency year, students are expected to complete at least 16 hours of coursework that apply directly to the degree. Of these 16 hours, 13 hours of coursework are prescribed.

Fall Semester (5 hours)

- MSE 7001 Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- SPSE 7010 Educational Research Methodology OR SPSE 7270 Learning Theories in Mathematics and Science Education **3 credit hours**

Spring Semester (5 hours)

- MSE 7002 Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**
- SPSE 7180 Qualitative Evaluation and Research Methods OR MSE 7900 The Nature of Mathematics, Science, and STEM **3 credit hours**

Summer (3 hours)

- MSE 7900 The Nature of Mathematics, Science, and STEM OR BIOL 7900 Teaching and Learning Biology/CHEM 7900 Teaching and Learning in Chemistry OR MATH 7320 Mathematical Problem Solving **3 credit hours**

In addition, during the residency year, students are expected to complete each of the following:

1. **Attend at least one conference**: The conference should be directly related to the student's concentration (i.e,. biology education, chemistry education, science education, mathematics education) and should be at the regional, national, or international level. The advisor must approve the selected conference.
2. **Make significant progress* toward the submission of a manuscript on which the student is a co-author.** The manuscript will be prepared under the guidance of or in conjunction with MSE faculty. Residency seminars will support this process.
3. **Attend at least five (5) program activities not associated with course credit**: The MSE program has numerous activities that occur during the academic year (i.e., fall and spring semesters). These include seminars, book club meetings, reading/writing groups, journal clubs, etc. Some of these are intended for all MSE students while others are specific to concentrations.

***NOTE:** Significant progress toward the submission of a manuscript is defined as legitimate peripheral participation of the student within one or more of the following components of a manuscript:

- Research rationale/study introduction
- Literature review
- Research design and methodology
- Data analysis data presentation
- Writing

Curriculum: Mathematics and Science Education, Mathematics Education

The following illustrates the minimum coursework requirements. In addition, a maximum of 36 hours of dissertation research may be required to fulfill degree requirements.

Core Courses (27 hours)

- MSE 7001 - Residency Seminar in Mathematics and Science Education I **1 to 2 credit hours (2 credit hours required)**
- MSE 7002 - Residency Seminar in Mathematics and Science Education II **1 to 2 credit hours (2 credit hours required)**
- MSE 7310 - Theoretical Frameworks in Mathematics and Science Education **3 credit hours**
- MSE 7800 - Teaching Internship **3 credit hours**
- MSE 7820 - Research Seminar in Mathematics and Science Education **1 credit hours**
  NOTE: Students are required to take MSE 7820 at least twice before candidacy.
- MSE 7900 - The Nature of Mathematics, Science, and STEM **3 credit hours**
- SPSE 7010 - Educational Research Methodology **3 credit hours**
- SPSE 7180 - Qualitative Evaluation and Research Methods **3 credit hours**
- SPSE 7270 - Learning Theories in Mathematics and Science Education **3 credit hours**

- ALSI 7600 - Educational Statistics **3 credit hours** OR
- ALSI 7620 - Advanced Quantitative Research Methodologies **3 credit hours** OR
- PSY 7280 - Psychological Statistics: Regression **3 credit hours** OR
- PSY 7460 - Factor Analysis and Related Methods **3 credit hours** OR
- PSY 7550 - Structural Equation Modeling **3 credit hours** OR
- PSY 7565 - Behavioral Statistics Using R **3 credit hours**

Concentration Core (18 hours)

- MATH 6900 - Research in Mathematics Education **3 credit hours**
- MATH 7320 - Mathematical Problem Solving **3 credit hours**
- MATH 7330 - Ethics in Mathematics Education **3 credit hours**
- MATH 7340 - History, Curriculum, and Policy in Mathematics Education **3 credit hours**
- MATH 7900 - Teaching and Learning Mathematics **3 credit hours**
- Elective **3 credit hours**

Advised Mathematics Electives (12-36 hours)

Must choose one:

- MATH 6330 - Algebra from an Advanced Perspective **3 credit hours**
- MATH 6340 - Geometry from an Advanced Perspective **3 credit hours**
- MATH 6350 - Probability and Statistics from an Advanced Perspective **3 credit hours**

Must choose two:

- MATH 6120 - Advanced Linear Algebra **3 credit hours**
- MATH 6170 - Sets and Logic **3 credit hours**
- MATH 6190 - Analysis I **3 credit hours**

Must choose one:

- STAT 6602 - Problems in Statistics-Regression Analysis **3 credit hours (3 credit hours required)**
- STAT 6603 - Problems in Statistics-Nonparametric Statistics **3 credit hours (3 credit hours required)**
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours (3 credit hours required)**

NOTE: In consultation with his or her major advisor and dissertation committee, each student may choose an additional 0-24 credit hours from courses in the College of Basic and Applied Sciences, College of Behavioral and Health Sciences, and the College of Education at the 6000 or 7000 level.

Dissertation (12-36 hours)

- MSE 7640 - Dissertation Research in Mathematics and Science Education **1 to 6 credit hours**

Mathematic and Science Education

MSE 7001 - Residency Seminar in Mathematics and Science Education I
1 to 2 credit hours Focuses on the transition of a student into a scholar. Attention is given to scholarly reading, scholarly discourse, and scholarly writing. Students will build these skills by engaging in regularly scheduled research seminars covering topics of interest in mathematics and science education and through completion of residency requirement activities.

MSE 7002 - Residency Seminar in Mathematics and Science Education II
1 to 2 credit hours Focuses on the expectations placed on university faculty. Attention given to demands regarding teaching, research, and service. Students will continue building scholarship skills by engaging in regularly scheduled research seminars covering topics of interest in mathematics and science education and through completion of residency requirement activities.

MSE 7310 - Theoretical Frameworks in Mathematics and Science Education
3 credit hours Focuses on how researchers utilize theoretical frameworks while conducting and reporting research in mathematics and science education. Attention given to prominent theoretical frameworks in mathematics and science education and the role of frameworks in connecting methodology and the reporting of findings in mathematics education research.

MSE 7500 - Directed Research in Mathematics and Science Education
1 to 6 credit hours For Ph.D. students. Selection of a research problem, review of pertinent literature, protocol design, collection and analysis of data, and preparation of results for publication. May be repeated multiple times for credit. Up to 6 hours of credit may be applied to the Mathematics and Science Education Ph.D. degree. S/U grading.

MSE 7640 - Dissertation Research in Mathematics and Science Education
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of the dissertation. Once enrolled, students must register for at least one credit hour of dissertation research each semester until completion. S/U grading.

MSE 7654 - Professional Seminar: Topic
1 to 3 credit hours (Same as COMS 7654/MOBI 7654.) Focuses on a specific topic in a given semester. Topics include themes for advancing graduate students professional knowledge such as grant proposal preparation process, making successful presentations, and publishing research in the field. May be repeated with different topic.

MSE 7700 - Advanced Concepts in Mathematics and Science Education
3 or 4 credit hours Covers advanced topics specific to different subdisciplines of mathematics and science education not covered in core or elective courses offered through the program. Students will work under the direct supervision of the instructor. Involves lecture and/or laboratory components. Repeatable for 6-8 credit hours.

MSE 7800 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

MSE 7810 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

MSE 7820 - Research Seminar in Mathematics and Science Education
1 credit hours Prerequisite: Must be currently enrolled in the Mathematics and Science Education Ph.D. program. Required of graduate students specializing in mathematics and science education. Involves presentations on current issues, related research, and policy developments in mathematics and science education. May be repeated.

MSE 7840 - Special Topics in Mathematics and Science Education
2 credit hours Required of graduate students specializing in Mathematics and Science Education. May be repeated.

MSE 7845 - Nature of Mathematics and Science
2 credit hours Focuses on the Nature of Mathematics (NOM) and the Nature of Science (NOS). Attention given to how the fields of mathematics, biology, and chemistry practiced as well as scientific inquiry, mathematical, practices, conceptions of NOS and NOM, and pedagogical considerations.

MSE 7848 - Knowledge for Teaching in Mathematics and Science
2 credit hours Focuses on the knowledge required to be an effective teacher. Attention given to teacher knowledge constructs and the recognition of one's self as a mentor and teacher educator in formal and informal contexts.

MSE 7900 - The Nature of Mathematics, Science, and STEM
3 credit hours Focus on the Nature of Mathematics (NOM), the Nature of Science (NOS), and the nature of integrated STEM. Attention will be given to how the fields practiced; conceptions of NOS, NOM, and STEM; pedagogical considerations; and the education research related to these topics.

Molecular Biosciences, Ph.D.

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The Doctor of Philosophy (Ph.D.) in Molecular Biosciences is an interdisciplinary program in the College of Basic and Applied Sciences that includes faculty from the departments of Biology, Chemistry, Mathematical Sciences, and School of Agriculture. It is a rigorous, research-oriented course of study that aims to help students develop an understanding of cellular function and biological mechanisms at a molecular scale.

All students in the program will be expected to complete a minimum of two consecutive semesters of full-time study in residence at MTSU. Only full-time students will be admitted.

Please see undergraduate catalog for information regarding undergraduate programs.

Admissions Requirements

Admission to the Ph.D. in Molecular Biosciences program is based on a comprehensive assessment of a candidate's qualifications, including

1. an earned bachelor's, master's, or doctoral degree from an accredited university or college in biochemistry, biology, chemistry, or a closely related subject. In addition, the following undergraduate courses are specifically recommended:
    a. six semesters of a combination of general biology, microbiology, cell biology, genetics, and biochemistry courses, including some laboratory coursework;
    b. two semesters of general/inorganic chemistry and at least one semester of organic chemistry, which should include a laboratory component;
    c. two semesters of physics;
    d. one semester of calculus.

    NOTE: ***Students who lack any component of these minimum course requirements will be asked to remedy their deficiency or demonstrate competency in these areas.***
2. an acceptable grade point average in all college work taken. Successful applicants typically have a minimum 3.50 GPA in their graduate work or a minimum 3.00 GPA when entering with a bachelor's degree.
3. acceptable scores on the Graduate Record Examination (GRE).
4. letters of recommendation that address the applicant's potential to successfully complete a Ph.D. in Molecular Biosciences.

NOTE: ***International students must also meet the College of Graduate Studies requirement for proof of English language proficiency. This may be accomplished by submission of TOEFL, UMELI, or IELTS scores that meet the college's requirements or by successful completion of level 112 of ELS coursework.***

Applicants will be interviewed via Zoom (or equivalent) by the Molecular Biosciences (MOBI) admissions committee (six faculty members) and the MOBI director.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Application deadlines: The application deadline is January 31 for those wishing to be considered for graduate assistantships for the following Fall. Applications may also be considered for Spring admission. This deadline is September 30. Late applications may also be considered, but assistantship availability may be limited.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.
3. submit official scores for the verbal, quantitative, and analytical writing measures of the GRE that indicate potential for success in the Molecular Biosciences program. The GRE is an important measure and is given significant consideration in the admissions review process. Successful applicants typically have scores on the Verbal and Quantitative measure above the 50th percentile for persons intending graduate study in science with a combined score that exceeds 297.

4. provide letters of recommendation from at least three professors or professionals that address the applicant's potential to successfully complete a Ph.D. in the Molecular Biosciences program.
5. submit a one- to two-page statement explaining why they are seeking a Ph.D. degree, listing areas of research interest, and indicating three professors in the program whose research he/she finds intriguing. Faculty research interests can be found at www.mtsu.edu/programs/molecular-biosciences-phd/. Applicants are strongly encouraged to contact potential faculty mentors to find out more about their research, possible dissertation projects, and their availability to host lab rotations.

Degree Requirements

The Ph.D. in Molecular Biosciences requires completion of a minimum of 65-95 semester hours.
Candidate must

1. complete a minimum of 65 post-baccalaureate semester hours (see Curriculum section below for specifics);
2. make at least two research presentations at regional, national, or international meetings as the lead author or coauthor;
3. be the/a first or primary author (dependent upon field of study) on at least one (1) research article published or in press in a peer-reviewed journal. Review articles or book chapters do not fulfill this requirement. Articles on subject matter unrelated to the student's field of dissertation research also do not fulfill this requirement;
4. in collaboration with an MTSU faculty member serving as principal investigator, make a significant contribution to the development of at least one external grant proposal;
5. complete a dissertation and successfully defend it in the final oral examination.

Curriculum: Molecular Biosciences

The following illustrates the minimum coursework requirements. In addition, a maximum of 62 hours of directed research and dissertation research may be required to fulfill degree requirements.

Core Courses (24 hours)

- MOBI 7010 - Lab Rotation in Molecular Biosciences **1 credit hours**
- MOBI 7100 - Experimental Design in Molecular Biosciences **3 credit hours**
- MOBI 7105 - Experimental Techniques in Molecular Biosciences **3 credit hours**
- MOBI 7205 - Dissertation Proposal Preparation in Molecular Biosciences **1 credit hours**
- MOBI 7300 - Current Topics in Scientific Literature and Communication in Molecular Biosciences I **2 credit hours** (Repeat for 4 hours total)
- MOBI 7400 - Current Topics in Scientific Literature and Communication in Molecular Biosciences II **2 credit hours**
  (Repeat for 12 hours total)

Electives (9 hours)

Each student, in consultation with his/her advisor and committee, will select at least 9 hours of elective coursework from at least two of the rubrics represented below with a minimum of 3 hours being 7000 level. Other courses not listed below may be substituted with approval of the student's advisor and committee.

- BIOL 6220 - Herpetology **3 credit hours**
- BIOL 6270 - Cell Metabolism and Human Disease **3 credit hours**
- BIOL 6290 - Advanced Scanning Electron Microscopy **4 credit hours**
- BIOL 6360 - Energy Dispersive X-Ray Theory and Analysis **1 credit hours**
- BIOL 6390 - Advanced Cell and Molecular Biology **3 credit hours**
- BIOL 6410 - Advanced Transmitting Electron Microscopy **4 credit hours**
- BIOL 6430 - Clinical and Pathogenic Microbiology **4 credit hours**
- BIOL 6440 - Advanced Virology **4 credit hours**

- BIOL 6450 - Advancements in Molecular Genetics **4 credit hours**
- BIOL 6590 - Environmental Toxicology **4 credit hours**
- BIOL 6720 - Advanced Animal Development **4 credit hours**
- BIOL 6730 - Advanced Microbial Physiology and Biochemistry **4 credit hours**
- BIOL 6750 - Advanced Plant Biotechnology **4 credit hours**
- BIOL 6770 - Issues in Biotechnology **2 credit hours**
- BIOL 6780 - Principles of Systematics **4 credit hours**
- CHEM 6100 - Intermediate Organic Chemistry **3 credit hours**
- CHEM 6110 - Topics in Organic Chemistry **3 to 6 credit hours**
- CHEM 6230 - Intermediate Analytical Chemistry **4 credit hours**
- CHEM 6300 - Intermediate Physical Chemistry **3 credit hours**
- CHEM 6500 - Biochemistry I **3 credit hours**
- CHEM 6510 - Biochemistry II **3 credit hours**
- CHEM 6520 - Topics in Biochemistry **3 credit hours**
- CHEM 6530 - Biochemical Techniques **2 credit hours**
- CHEM 6610 - Environmental Chemistry **3 credit hours**
- CHEM 6720 - Topics in Physical Chemistry **3 to 6 credit hours**
- CHEM 7110 - Advanced Topics in Organic Chemistry **3 credit hours**
- CHEM 7510 - Advanced Biochemistry **3 credit hours**
- CHEM 7710 - Topics in Applied Chemistry **3 to 6 credit hours**
- MOBI 7010 - Lab Rotation in Molecular Biosciences **1 credit hours**
- MOBI 7200 - Biomolecular Modeling and Simulation **3 credit hours**
- MOBI 7654 - Professional Seminar: Topic **1 to 3 credit hours**
- MOBI 7700 - Advanced Concepts in Molecular Biosciences **3 or 4 credit hours**
- PHYS 7010 - Principles of Molecular Biophysics **3 credit hours**
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours**
- STAT 7020 - Introduction to Biostatistics **3 credit hours**

Directed Research and Dissertation (32-62 hours)

At least 32 hours of directed research plus dissertation research must be completed.
NOTE: ***No more than 62 hours of directed research and dissertation research may be applied toward degree requirements.***

- MOBI 7500 - Directed Research in Molecular Biosciences **1 to 6 credit hours**
- MOBI 7640 - Dissertation Research in Molecular Biosciences **1 to 6 credit hours**

Program Notes

Students entering with a master's degree in a science discipline may have up to 16 graduate hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the Molecular Biosciences curriculum.

Molecular Biosciences

MOBI 7010 - Lab Rotation in Molecular Biosciences
1 credit hours Prerequisite: Admission to the MOBI doctoral program. Explores three molecular bioscience research environments for five weeks each.

MOBI 7100 - Experimental Design in Molecular Biosciences
3 credit hours Prerequisite: Admission to the MOBI doctoral program. Explores ethics, experimental design, and statistical considerations relevant to molecular biosciences.

MOBI 7105 - Experimental Techniques in Molecular Biosciences
3 credit hours Prerequisite: Admission to the MOBI doctoral program. Explores current and emerging methods in molecular bioscience.

MOBI 7200 - Biomolecular Modeling and Simulation
3 credit hours Prerequisites: Differential equations and linear algebra. Introduces the modeling of biomolecular structure and dynamics. Covers three broad topics: (a) biomolecular structure; (b) molecular force field origin, composition, and evaluation techniques; and (c) simulation techniques-computational sampling by geometric optimization, Monte Carlo methods, and molecular dynamics.

MOBI 7205 - Dissertation Proposal Preparation in Molecular Biosciences
1 credit hours Prerequisite: Admission to the MOBI doctoral program. Preparation of dissertation proposal with the research mentor.

MOBI 7300 - Current Topics in Scientific Literature and Communication in Molecular Biosciences I
2 credit hours Prerequisite: Admission to the MOBI doctoral program. Explores current primary literature and practices scientific communication skills at the introductory level.

MOBI 7400 - Current Topics in Scientific Literature and Communication in Molecular Biosciences II
2 credit hours Prerequisite: Admission to the MOBI doctoral program. Explores current topic-specific primary literature and practices scientific communication skills at the professional level.

MOBI 7500 - Directed Research in Molecular Biosciences
1 to 6 credit hours For Ph.D. students prior to advancement to candidacy. Selection of a research problem, review of pertinent literature, protocol design, collection and analysis of data and preparation of results for publication. S/U grading.

MOBI 7640 - Dissertation Research in Molecular Biosciences
1 to 6 credit hours For Ph.D. candidates. Ongoing investigation of a research problem, review of pertinent literature, protocol design, collection and analysis of data and preparation of results for publication and as Ph.D. dissertation. Students must complete a total of at least 12 hours to earn degree. S/U grading.

MOBI 7654 - Professional Seminar: Topic
1 to 3 credit hours (Same as COMS 7654/MSE 7654.) Focuses on a specific topic in a given semester. Topics include themes for advancing graduate students professional knowledge such as grant proposal preparation process, making successful presentations, and publishing research in the field. May be repeated with different topic.

MOBI 7700 - Advanced Concepts in Molecular Biosciences
3 or 4 credit hours Covers advanced topics and protocols specific to different subdisciplines in molecular biosciences not covered in core or elective courses offered through the program. Students work under the direct supervision of the instructor; coursework will involve lecture and/or laboratory components. Repeatable for 6 to 8 credit hours.

Professional Science, Actuarial Science Concentration, M.S.

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The College of Basic and Applied Sciences offers the Master of Science with a major in Professional Science (M.S.) with six concentrations: Actuarial Science, Biostatistics, Biotechnology, Engineering Management, Fermentation Science, and Health Care Informatics.
The concentration in Actuarial Science offers preparation, basic knowledge, and professional skills to work as an actuary and to pass actuarial professional examinations.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Professional Science with a concentration in Actuarial Science requires

1. an earned bachelor's degree from an accredited university or college with a course in Multivariate Calculus (MATH 3110 or the equivalent) with a grade of C (2.00) or better and a course in Linear Algebra (MATH 2010 or equivalent) with a grade of C (2.00) or better;
2. basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases;
3. appropriate undergraduate preparation for advanced study of actuarial science.

Application Procedure

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference to askgrad@mtsu.edu (or mail to College of Graduate Studies);
4. submit an official Graduate Record Examination (GRE) report. A composite GRE score of 286 is expected for consideration for unconditional admission.

Degree Requirements

The Master of Science in Professional Science with a concentration in Actuarial Science requires completion of 36 semester hours.

Curriculum: Professional Science, Actuarial Science

The following illustrates the minimum coursework requirements.

Core Courses (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**

Concentration Courses (21 hours)

Required Courses (9 hours)

- ACSI 6020 - Construction and Evaluation of Actuarial Models **3 credit hours**
- ACSI 6030 - Actuarial Models for Life Contingencies **3 credit hours**
- ACSI 6040 - Actuarial Models for Financial Economics **3 credit hours**

12 hours from the following:

- ACSI 5220 - Mathematics of Corporate Finance **3 credit hours**
- ACSI 5230 - Mathematics of Compound Interest **3 credit hours**
- ACSI 5240 - Mathematics of Interest Theory, Economics, and Finance **3 credit hours**
- ACSI 5330 - Actuarial Mathematics I **3 credit hours**
- ACSI 5630 - Mathematics of Risk Management **3 credit hours**
- ACSI 5640 - Mathematics of Options, Futures, and Other Derivatives **3 credit hours**
- ACSI 6010 - Introduction to Loss Models **3 credit hours**
- ACSI 6110 - Predictive Analysis **3 credit hours**
- ACSI 6600 - Problems in Actuarial Science **1 to 6 credit hours**
- ECON 6060 - Econometrics I **3 credit hours**
- ECON 6070 - Econometrics II **3 credit hours**
- STAT 5200 - Statistical Methods for Forecasting **3 credit hours**
- STAT 6160 - Advanced Mathematical Statistics I **3 credit hours**
- STAT 6180 - Advanced Mathematical Statistics II **3 credit hours**

- MATH 6601 - Problems in Mathematics-Advanced Calculus **1 to 9 credit hours** OR
- MATH 6602 - Problems in Mathematics-Number Theory **1 to 9 credit hours** OR
- MATH 6603 - Problems in Mathematics-Mathematics of Finance **1 to 9 credit hours** OR
- MATH 6604 - Problems in Mathematics-Mathematics of Life Contingencies **1 to 9 credit hours** OR
- MATH 6605 - Problems in Mathematics-Numerical Analysis **1 to 9 credit hours** OR
- MATH 6606 - Problems in Mathematics-Topology **1 to 9 credit hours** OR
- MATH 6607 - Problems in Mathematics-Abstract Algebra **1 to 9 credit hours** OR
- MATH 6608 - Problems in Mathematics-Combinatorics and Graph Theory **1 to 9 credit hours**

Professional Science, Biostatistics Concentration, M.S.

Saeed Foroudastan, Director
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The College of Basic and Applied Sciences offers the Master of Science with a major in Professional Science (M.S.) with six concentrations: Actuarial Science, Biostatistics, Biotechnology, Engineering Management, Fermentation Science, and Health Care Informatics.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Professional Science with a concentration in Biostatistics requires

1. an earned bachelor's degree from an accredited university or college with a course in multivariate calculus with a grade of C (2.00) or better and a course in linear algebra with a grade of C (2.00) or better;
2. basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases;
3. the appropriate undergraduate preparation for advanced study of biostatistics.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference to askgrad@mtsu.edu (or mail to College of Graduate Studies);
4. submit an official Graduate Record Examination (GRE) report. A composite GRE score of 286 is expected for consideration for unconditional admission.

Degree Requirements

The Master of Science in Professional Science with a concentration in Biostatistics requires completion of 36 semester hours.

Curriculum: Professional Science, Biostatistics

The following illustrates the minimum coursework requirements.

Core Courses (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours** *
  ***With permission of advisor, students may substitute any other course for STAT 5140.**

Concentration Courses (21 hours)

Required Courses (12 hours)

- STAT 6160 - Advanced Mathematical Statistics I **3 credit hours**
- STAT 6180 - Advanced Mathematical Statistics II **3 credit hours**
- STAT 6510 - Biostatistical Methods **3 credit hours**
- STAT 6520 - Advanced Biostatistical Methods **3 credit hours**

9 hours from the following:

- STAT 5700 - Analysis of Large-Scale Data Sets **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**
- STAT 6602 - Problems in Statistics-Regression Analysis **3 credit hours**
- STAT 6603 - Problems in Statistics-Nonparametric Statistics **3 credit hours**
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours**
- STAT 6605 - Problems in Statistics-SAS Programming **1 to 9 credit hours**

Professional Science, Biotechnology Concentration, M.S.

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The College of Basic and Applied Sciences offers the Master of Science with a major in Professional Science (M.S.) with six concentrations: Actuarial Science, Biostatistics, Biotechnology, Engineering Management, Fermentation Science, and Health Care Informatics.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master in Science in Professional Science with a concentration in Biotechnology requires

1. an earned bachelor's degree from an accredited university or college with a major in biology or chemistry or another major. Student must have taken organic chemistry and at least three undergraduate courses related to biotechnology, including genetics;
2. basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases;
3. the appropriate undergraduate preparation for advanced study of Biotechnology.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference to askgrad@mtsu.edu (or mail to College of Graduate Studies);
4. submit an official Graduate Record Examination (GRE) report. A composite GRE score of 286 is expected for consideration for unconditional admission.

Degree Requirements

The Master of Science in Professional Science with a concentration in Biostatistics requires completion of 36 semester hours.

Curriculum: Professional Science, Biotechnology

The following illustrates the minimum coursework requirements.

Core Courses (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**

Concentration Courses (21 hours)

Required Courses (5 hours)

- BIOL 5550 - Biotechnology **3 credit hours**
- BIOL 6770 - Issues in Biotechnology **2 credit hours**

16 hours from the following:

- BIOL 5460 - Human Genetics **3 credit hours** AND
- BIOL 5461 - Human Genetics Lab **0 credit hours**

- BIOL 5510 - Food and Industrial Microbiology **4 credit hours**

- BIOL 6350 - Biostatistical Analysis **4 credit hours** AND
- BIOL 6351 - Biostatistical Analysis Lab **0 credit hours**

- BIOL 6380 - Experimental Immunology **4 credit hours** AND
- BIOL 6381 - Experimental Immunology Lab **0 credit hours**

- BIOL 6390 - Advanced Cell and Molecular Biology **3 credit hours** AND
- BIOL 6391 - Advanced Cell and Molecular Biology Lab **0 credit hours**

- BIOL 6410 - Advanced Transmitting Electron Microscopy **4 credit hours**
- BIOL 6430 - Clinical and Pathogenic Microbiology **4 credit hours**
- BIOL 6440 - Advanced Virology **4 credit hours**
- BIOL 6450 - Advancements in Molecular Genetics **4 credit hours**
- BIOL 6500 - Special Problems in Biology **1 to 4 credit hours**
- BIOL 6590 - Environmental Toxicology **4 credit hours**
- BIOL 6650 - Seminar **1 credit hours**
- BIOL 6660 - Seminar **2 credit hours**

- BIOL 6720 - Advanced Animal Development **4 credit hours** AND
- BIOL 6721 - Advanced Animal Development Lab **0 credit hours**

- BIOL 6730 - Advanced Microbial Physiology and Biochemistry **4 credit hours**
- BIOL 6750 - Advanced Plant Biotechnology **4 credit hours**
- BIOL 6760 - Bioinformatics **4 credit hours**
- CHEM 6510 - Biochemistry II **3 credit hours**
- CHEM 6530 - Biochemical Techniques **2 credit hours**

Professional Science, Engineering Management Concentration, M.S.

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The College of Basic and Applied Sciences offers the Masters of Science with a major in Professional Science (M.S.) with six concentrations: Actuarial Science, Biostatistics, Biotechnology, Engineering Management, Fermentation Science, and Health Care Informatics.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Professional Science with a concentration in Engineering Management requires

1. an earned bachelor's degree from an accredited university or college with a major in Engineering or related areas;
2. basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference to askgrad@mtsu.edu (or mail to College of Graduate Studies);
4. submit an official Graduate Record Examination (GRE) report. A composite GRE of 286 is expected for consideration for unconditional admission.

Degree Requirements

The Master of Science in Professional Science with a concentration in Engineering Management requires completion of 36 semester hours.

Curriculum: Professional Science, Engineering Management

Candidates must complete 36 hours in the following course of study.

Core Courses (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**

Concentration Courses (21 hours)

- ET 6010 - Safety Planning **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**
- ET 6300 - PMI Project Management **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6620 - Methods of Research **3 credit hours**
- ET 6810 - Engineering Management Theory and Application **3 credit hours**
- ET 6870 - Engineering Management Systems **3 credit hours**

Professional Science, Fermentation Science Concentration, M.S.

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The College of Basic and Applied Sciences offers the Master of Science with a major in Professional Science (M.S.) with six concentrations: Actuarial Science, Biostatistics, Biotechnology, Engineering Management, Fermentation Science, and Health Care Informatics.

The concentration in Fermentation Science offers preparation for students to assume management positions in industries throughout the state employing fermentation.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Professional Science with a concentration in Fermentation Science requires

1. an earned bachelor's degree from an accredited university or college in a relevant field such as agriculture, biology, brewing science, chemistry, food science, and microbiology and a commitment to developing the necessary analytic and program management skills and expertise required of today's fermentation professional;
2. basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php/**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference to askgrad@mtsu.edu (or mail to College of Graduate Studies);
4. submit an official Graduate Record Examination (GRE) report. A composite GRE score of 286 is expected for consideration for unconditional admission.

Degree Requirements

The Master of Science in Professional Science with a concentration in Fermentation Science requires completion of 37 semester hours.

Curriculum: Professional Science, Fermentation Science

The following illustrates the minimum coursework requirements.

Core Courses (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**

Concentration Courses (22 hours)

Required Courses (16 hours)

- BIOL 5510 - Food and Industrial Microbiology **4 credit hours**
- FERM 6600 - Probiotics, Prebiotics, and Bioprocessing **3 credit hours**
- FERM 6100 - Food Contamination, Safety, and Regulation **3 credit hours**
- FERM 6700 - Consumer Motivation and Sensory Evaluation of Fermented Foods **3 credit hours**
- FERM 6450 - Industrial Applications of Fermentation **3 credit hours**

3 hours from the following:

- FERM 5560 - Applied Fermentation: Biomass and Biofuels **3 credit hours**
- FERM 5570 - Applied Fermentation: Milk, Meat, and Grain **3 credit hours**
- FERM 5580 - Applied Fermentation: Fruits and Vegetables **3 credit hours**

3 hours from the following:

- MBAI 6905 - Applied Business Analytics **3 credit hours**
- ET 6870 - Engineering Management Systems **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**

Professional Science, Health Care Informatics Concentration, M.S.

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The College of Basic and Applied Sciences offers the Master of Science with a major in Professional Science (M.S.) with six concentrations: Actuarial Science, Biostatistics, Biotechnology, Engineering Management, Fermentation Science, and Health Care Informatics.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Professional Science with a concentration in Health Care Informatics requires

- an undergraduate or graduate degree in a relevant field including the health sciences, information technology, allied health professions, business, or statistics, and a commitment to developing the necessary analytic and program management skills and expertise required of today's health informatics professional. Contact the program coordinator if you have questions about the relevance of your degree.
- applicants possessing intermediate proficiency with multiple computer programs, including but not limited to word processing, data management/presentation, and statistical analysis packages commonly used in business and healthcare industries. Familiarity with these programs is required and serves as the foundation upon which other skill sets are developed.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference from mentors/colleagues able to speak to your ability to succeed at graduate study in health care informatics.

Degree Requirements

The Master of Science in Professional Science with a concentration in Health Care Informatics requires completion of 36 semester hours.

Curriculum: Professional Science, Health Care Informatics

The following illustrates the minimum coursework requirements.

Core Courses (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**

Concentration Courses (21 hours)

Required Courses (15 hours)

- BLAW 6500 - Legal Aspects of Healthcare **3 credit hours**
- ET 6300 - PMI Project Management **3 credit hours**
- MBAI 6835 - IT Applications for Decision Making **2 credit hours**
- MBAI 6905 - Applied Business Analytics **3 credit hours**
- INFS 6300 - Management of Security Operations **3 credit hours**
- HCI 6420 - Topics in Contemporary Health Care Informatics **1 credit hours**

6 hours from the following:

- BIA 6910 - Business Intelligence **3 credit hours**
- ET 6010 - Safety Planning **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6870 - Engineering Management Systems **3 credit hours**
- HLTH 6510 - The Nation's Health **3 credit hours**

Health Care Informatics

HCI 6400 - Introduction to the Clinical Healthcare Environment
2 credit hours For M.S. in Professional Science informatics professionals without a clinical health care background. Topics include an overview of the health care industry with a cursory analysis of the various players and their roles, as well as current issues in health care delivery. Students with two or more years of clinical health care experience are not required to take this course and may choose an elective.

HCI 6401 - Introduction to Healthcare Informatics
3 credit hours Prerequisite: Digital literacy. Foundation to informatics study providing the theoretical framework for information management within various health care setting. Topics include an overview of health care information systems and applications and national health care information management initiatives.

HCI 6402 - Health Care Information Systems and Technology Integration
3 credit hours Foundations of information system hardware and software interaction inclusive of the structure and function of networks and the Internet. Offers preparation for leading technology integration projects in practice. Additional topics will include computer hardware found in health care information systems, interface standards, and human-computer interaction such as ergonomics and workflow analysis.

HCI 6403 - Project Management in the Design and Analysis of Health Care Information Systems
3 credit hours Provides knowledge and skills needed to analyze and design health care information systems. Informatics models, conceptual frameworks, and practice activities discussed. Offered spring, summer, and fall semesters.

HCI 6404 - Project Management in the Implementation and Evaluation of Health Care Information Systems
3 credit hours Explores project management concepts and skills related to the implementation and evaluation of information systems. Topics include project management, systems testing, implementation strategies, and solution evaluation.

HCI 6406 - Healthcare Data Analysis and Evidence Based Practice
3 credit hours Introduces the most frequently used statistical techniques used in analyzing healthcare data. Statistical topics include data management, descriptive statistics, reliability and validity, hypothesis testing, analysis of variance, correlational and linear regression analysis, Chi-Square, nonparametric methods, survival analysis, and formal presentation of the results. Additionally, the concepts related to complete data analysis within the healthcare environment will be explored and will focus on healthcare practice outcomes for quality improvement. Offered spring, summer, and fall semesters.

HCI 6407 - Informatics Applications I
2 credit hours Integrates informatics concepts with tools used in health care informatics practice. Topics include database design, concept mapping, workflow analysis, and solution modeling.

HCI 6409 - Informatics Applications II
4 credit hours Builds upon the concepts and technology introduced in other related informatics courses to provide additional experiences in informatics applications in health care settings. Opportunity will be provided to explore a variety of informatics applications and then identify specific informatics applications based on practice interests. Offered spring, summer, and fall semesters.

HCI 6420 - Topics in Contemporary Health Care Informatics
1 credit hours Introductory seminar that covers the current issues surrounding technology and health care and the drive to produce better patient outcomes. Topics include the current health care informatics market, the current technological landscape and its limitations, and the role of data and informatics in improving patient outcomes.

Aerospace

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The Department of Aerospace offers the Master of Science (M.S.) in Aeronautical Science with concentrations in Aviation Management, Aviation Education, and Aviation Safety and Security Management. A minor in Aerospace is also offered.

Aeronautical Science, Aviation Education Concentration, M.S.

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The Department of Aerospace offers the Master of Science (M.S.) in Aeronautical Science with concentrations in Aviation Education, Aviation Management, and Aviation Safety and Security Management.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions are based on a holistic assessment of an applicant's credentials. Applicants must have graduated from an accredited four-year college or university with a minimum 3.00 GPA. Completion of the Graduate Record Exam (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) with an acceptable score (typically in the 50th percentile for the test selected) is required.* Three letters of recommendation from academic or professional acquaintances and a personal statement are also required. The personal statement should be approximately 400 words and should outline the student's academic interests, potential area(s) of research interest, and professional goals. Undergraduate transcripts must reflect 15 semester hours of aviation coursework. Applicants with undergraduate majors in fields other than aviation will be required to complete AERO 1010 and AERO 1020 during their first semester in the M.S. program and 9 additional hours of undergraduate aviation courses prior to the completion of 21 hours of graduate credit. Applicants holding Federal Aviation Administration certificates may receive credit for AERO 1010 and AERO 1020.
NOTE:** ***The entrance exams requirement may be waived by the department based on previous degree and GPA.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. program in Aviation Administration.
3. submit official scores on the Graduate Record Examination (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) ***(may be waived by the department based on previous degree and GPA).***
4. submit official transcripts of all previous college work.
5. submit a personal statement.

Degree Requirements

The Master of Science in Aeronautical Science with a concentration in Aviation Education requires completion of a minimum of 36 semester hours. Student must select the thesis or non-thesis option.
Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice) the semester in which the candidate intends to graduate;
2. successfully complete a thesis or non-thesis option.

Curriculum: Aeronautical Science, Aviation Education

The following illustrates the minimum coursework requirements.

Thesis Option (36 hours)

Core Courses (21 hours)

- AERO 6120 - Aviation History **3 credit hours**
- AERO 6130 - Aviation Safety Management **3 credit hours**
- AERO 6150 - Aviation Industries **3 credit hours**
- AERO 6610 - Introduction to Aerospace Research **3 credit hours**
- AERO 6611 - Applied Statistics in Aerospace Research **3 credit hours**
- AERO 6640 - Thesis Research **1 to 6 credit hours (6 credit hours)**

Required Education Courses (6 hours)

- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**
- FOED 6020 - Educational Foundations **3 credit hours**

Education Electives (6 hours)

- SPSE 6250 - Seminar in Curriculum Improvement **3 credit hours**
- SPSE 6520 - Studies in Education: Curriculum **1 to 3 credit hours**
- SPSE 6900 - Online Learning and Instructional Design **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**

Aerospace Electives (3 hours)

- AERO 6050 - Aerospace Internship I **3 credit hours**
- AERO 6100 - Aviation Education Workshop **3 credit hours**
- AERO 6170 - Scheduled Air Carrier Operations **3 credit hours**
- AERO 6310 - Introduction to Aviation Security **3 credit hours**
- AERO 6330 - International Aviation Systems **3 credit hours**
- AERO 6350 - General Aviation **3 credit hours**
- AERO 6430 - Human Factors in Aviation **3 credit hours**

Non-Thesis Option (36 hours)

Core Courses (18 hours)

- AERO 6120 - Aviation History **3 credit hours**
- AERO 6130 - Aviation Safety Management **3 credit hours**
- AERO 6150 - Aviation Industries **3 credit hours**
- AERO 6610 - Introduction to Aerospace Research **3 credit hours**
- AERO 6611 - Applied Statistics in Aerospace Research **3 credit hours**
- AERO 6441 - Applied Research Capstone Project **3 credit hours**

Required Education Courses (6 hours)

- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**
- FOED 6020 - Educational Foundations **3 credit hours**

Education Electives (6 hours)

- SPSE 6250 - Seminar in Curriculum Improvement **3 credit hours**
- SPSE 6520 - Studies in Education: Curriculum **1 to 3 credit hours**
- SPSE 6900 - Online Learning and Instructional Design **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**

Aerospace Electives (6 hours)

- AERO 6050 - Aerospace Internship I **3 credit hours**
- AERO 6100 - Aviation Education Workshop **3 credit hours**
- AERO 6170 - Scheduled Air Carrier Operations **3 credit hours**
- AERO 6310 - Introduction to Aviation Security **3 credit hours**
- AERO 6330 - International Aviation Systems **3 credit hours**
- AERO 6350 - General Aviation **3 credit hours**
- AERO 6430 - Human Factors in Aviation **3 credit hours**

Aeronautical Science, Aviation Management Concentration, M.S.

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The Department of Aerospace offers the Master of Science (M.S.) in Aeronautical Science with concentrations in Aviation Education, Aviation Management, and Aviation Safety and Security Management.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions are based on a holistic assessment of an applicant's credentials. Applicants must have graduated from an accredited four-year college or university with a minimum 3.00 GPA. Completion of the Graduate Record Exam (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) with an acceptable score (typically in the 50th percentile for the test selected) is required. Three letters of recommendation from academic or professional acquaintances and a personal statement are also required. The personal statement should be approximately 400 words and should outline the student's academic interests, potential area(s) of research interest, and professional goals. Undergraduate transcripts must reflect 15 semester hours of aviation coursework. Applicants with undergraduate majors in fields other than aviation will be required to complete AERO 1010 and AERO 1020 during their first semester in the M.S. program and 9 additional hours of undergraduate aviation courses prior to the completion of 21 hours of graduate credit. Applicants holding Federal Aviation Administration certificates may receive credit for AERO 1010 and AERO 1020.
NOTE:** ***The entrance exams requirement may be waived by the department based on previous degree and GPA.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. program in Aviation Administration.
3. submit official scores on the Graduate Record Examination (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) (***may be waived by the department based on previous degree and GPA)***.
4. submit official transcripts of all previous college work.
5. submit personal statement.

Degree Requirements

The Master of Science in Aeronautical Science with a concentration in Aviation Management requires completion of a minimum of 36 semester hours. Candidates must select the thesis or non-thesis option.
Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice) the semester in which the candidate intends to graduate;
2. successfully complete a thesis or applied research capstone project.

Curriculum: Aeronautical Science, Aviation Management

The following illustrates the minimum coursework requirements.

Thesis Option (36 hours)

Core Courses (21 hours)

- AERO 6120 - Aviation History **3 credit hours**
- AERO 6130 - Aviation Safety Management **3 credit hours**
- AERO 6150 - Aviation Industries **3 credit hours**
- AERO 6610 - Introduction to Aerospace Research **3 credit hours**
- AERO 6611 - Applied Statistics in Aerospace Research **3 credit hours**
- AERO 6640 - Thesis Research **1 to 6 credit hours (6 credit hours required)**

Required Courses (12 hours)

- AERO 6170 - Scheduled Air Carrier Operations **3 credit hours**
- AERO 6190 - Airport Organizational Structures and Operational Activities **3 credit hours**
- AERO 6250 - Airport Policy and Planning **3 credit hours**
- AERO 6370 - Aviation Contracts and Leases **3 credit hours**

Electives (3 hours)

- AERO 6050 - Aerospace Internship I **3 credit hours**
- AERO 6220 - Environmental Policy **3 credit hours**
- AERO 6270 - Airport Design **3 credit hours**
- AERO 6330 - International Aviation Systems **3 credit hours**
- AERO 6350 - General Aviation **3 credit hours**

Non-Thesis Option (36 hours)

Core Courses (18 hours)

- AERO 6120 - Aviation History **3 credit hours**
- AERO 6130 - Aviation Safety Management **3 credit hours**
- AERO 6150 - Aviation Industries **3 credit hours**
- AERO 6610 - Introduction to Aerospace Research **3 credit hours**
- AERO 6611 - Applied Statistics in Aerospace Research **3 credit hours**
- AERO 6441 - Applied Research Capstone Project **3 credit hours (3 credit hours required)**

Required Courses (12 hours)

- AERO 6170 - Scheduled Air Carrier Operations **3 credit hours**
- AERO 6190 - Airport Organizational Structures and Operational Activities **3 credit hours**
- AERO 6250 - Airport Policy and Planning **3 credit hours**
- AERO 6370 - Aviation Contracts and Leases **3 credit hours**

Electives (6 hours)

- AERO 6050 - Aerospace Internship I **3 credit hours**
- AERO 6220 - Environmental Policy **3 credit hours**
- AERO 6270 - Airport Design **3 credit hours**

- AERO 6330 - International Aviation Systems **3 credit hours**
- AERO 6350 - General Aviation **3 credit hours**

Aeronautical Science, Aviation Safety and Security Management Concentration, M.S.

Paul Craig, Program Director
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The Department of Aerospace offers the Master of Science (M.S.) in Aeronautical Science with concentrations in Aviation Education, Aviation Management, and Aviation Safety and Security Management.
Please see the undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions are based on a holistic assessment of an applicant's credentials. Applicants must have graduated from an accredited four-year college or university with a minimum 3.00 GPA. Completion of the Graduate Record Exam (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) with an acceptable score (typically in the 50th percentile for the test selected) is required.* Three letters of recommendation from academic or professional acquaintances and a personal statement are also required. The personal statement should be approximately 400 words and should outline the student's academic interests, potential area(s) of research interest, and professional goals. Undergraduate transcripts must reflect 15 semester hours of aviation coursework. Applicants with undergraduate majors in fields other than aviation will be required to complete AERO 1010 and AERO 1020 during their first semester in the M.S. program and 9 additional hours of undergraduate aviation courses prior to the completion of 21 hours of graduate credit. Applicants holding Federal Aviation Administration certificates may receive credit for AERO 1010 and AERO 1020.
NOTE:** ***The entrance exams requirement may be waived by the department based on previous degree and GPA.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. program in Aviation Administration.
3. submit official scores on the Graduate Record Examination (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) (***may be waived by the department based on previous degree and GPA)***.
4. submit official transcripts of all previous college work.
5. submit personal statement.

Degree Requirements

The Master of Science in Aeronautical Science with a concentration in Aviation Safety and Security Management requires completion of a minimum of 36 semester hours. Candidates must select the thesis or non-thesis option.
Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice) usually taken in the semester in which the candidate intends to graduate;
2. successfully complete a thesis or applied research capstone project.

Curriculum: Aeronautical Science, Aviation Safety and Security Management

The following illustrates the minimum coursework requirements.

Thesis Option (36 hours)

Core Courses (21 hours)

- AERO 6120 - Aviation History **3 credit hours**
- AERO 6130 - Aviation Safety Management **3 credit hours**
- AERO 6150 - Aviation Industries **3 credit hours**
- AERO 6610 - Introduction to Aerospace Research **3 credit hours**
- AERO 6611 - Applied Statistics in Aerospace Research **3 credit hours**
- AERO 6640 - Thesis Research **1 to 6 credit hours (6 credit hours required)**

Required Courses (12 hours)

- AERO 6310 - Introduction to Aviation Security **3 credit hours**
- AERO 6320 - Aviation Security II **3 credit hours**
- AERO 6420 - Aviation Safety Investigation **3 credit hours**
- AERO 6430 - Human Factors in Aviation **3 credit hours**

Electives (3 hours)

- AERO 6050 - Aerospace Internship I **3 credit hours**
- AERO 6170 - Scheduled Air Carrier Operations **3 credit hours**
- AERO 6220 - Environmental Policy **3 credit hours**
- AERO 6350 - General Aviation **3 credit hours**
- ET 6010 - Safety Planning **3 credit hours**
- ET 6020 - Safety Technology and Engineering **3 credit hours**
- ET 6070 - Anthropometric Factors in Accident Prevention **3 credit hours**

- INFS 6610 - Information Systems Management and Applications **3 credit hours** OR
- INFS 6720 - Knowledge Management **3 credit hours**

Non-Thesis Option (36 hours)

Core Courses (18 hours)

- AERO 6120 - Aviation History **3 credit hours**
- AERO 6130 - Aviation Safety Management **3 credit hours**
- AERO 6150 - Aviation Industries **3 credit hours**
- AERO 6610 - Introduction to Aerospace Research **3 credit hours**
- AERO 6611 - Applied Statistics in Aerospace Research **3 credit hours**
- AERO 6441 - Applied Research Capstone Project **3 credit hours (3 credit hours required)**

Required Courses (12 hours)

- AERO 6310 - Introduction to Aviation Security **3 credit hours**
- AERO 6320 - Aviation Security II **3 credit hours**
- AERO 6420 - Aviation Safety Investigation **3 credit hours**
- AERO 6430 - Human Factors in Aviation **3 credit hours**

Electives (6 hours)

- AERO 6050 - Aerospace Internship I **3 credit hours**
- AERO 6170 - Scheduled Air Carrier Operations **3 credit hours**
- AERO 6220 - Environmental Policy **3 credit hours**
- AERO 6350 - General Aviation **3 credit hours**
- ET 6010 - Safety Planning **3 credit hours**
- ET 6020 - Safety Technology and Engineering **3 credit hours**
- ET 6070 - Anthropometric Factors in Accident Prevention **3 credit hours**

- INFS 6610 - Information Systems Management and Applications **3 credit hours** OR
- INFS 6720 - Knowledge Management **3 credit hours**

Aerospace Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Aerospace

AERO 5400 - Space
3 credit hours Extensive study of the history of space exploration, the successes and failures of manned and unmanned efforts, and what the future may be for human beings in space.

AERO 5490 - Aerospace Science for Teachers
3 credit hours For teachers who desire an introduction to the aviation and space industry.

AERO 5775 - Unmanned Aircraft Systems in Research and Applications
3 credit hours Overview of the use of unmanned aircraft systems in research and applications. Special emphasis on regulatory requirements, legal and ethical issues, safety, types of unmanned aircraft, sensors, flight operations, and choosing the right system for research or application. Requires occasional meetings at MTSU's Experiential Learning and Research Center for UAS demonstrations and hands-on flight operations. Not for credit for UAS Operations concentration students.

AERO 6050 - Aerospace Internship I
3 credit hours Prerequisite: Consent of department chair. Student employed by an acceptable airline, airport, or aerospace manufacturer for field work. Minimum 300 hours work required. Pass/Fail.

AERO 6076 - Selected Readings in Aerospace
3 credit hours Prerequisite: Graduate standing. Guided readings in aviation or space. Topics alternate each semester and range from historical events to possible future developments. Discussion, presentations, and critical analysis of material.

AERO 6100 - Aviation Education Workshop
3 credit hours (Same as YOED 6100.) A fundamental course in aviation education offered through a grant from the Tennessee Department of Transportation (TDOT) to Tennessee educators; designed to provide K-12 educators aviation education classroom strategies and materials. Includes an aircraft flight and a field trip.

AERO 6120 - Aviation History
3 credit hours Detailed examination of the development and role of aviation and its economic, social, and political impact on the modern world. Particular emphasis on the global aspects of civilian aviation and the consequences of the transportation revolution it engendered. Specific topics analyzed in detail each semester.

AERO 6130 - Aviation Safety Management
3 credit hours An examination of the various programs which airport operators employ in operating and maintaining airport safety and security services. Special emphasis on federal guidelines and their applications at commercial service airports.

AERO 6150 - Aviation Industries
3 credit hours An overview of domestic and international air transportation businesses. Includes an analysis of extant and forecast labor requirements.

AERO 6170 - Scheduled Air Carrier Operations
3 credit hours An examination of contemporary problems and issues confronting airline industry policy makers, government regulators, managers, and the traveling public.

AERO 6190 - Airport Organizational Structures and Operational Activities
3 credit hours A critical analysis of airport organizational structures, functions, and constraints affecting the airport. A detailed view of operational activities and methods to improve airport efficiency.

AERO 6220 - Environmental Policy
3 credit hours Airport planning and land use programs and procedures as they are currently used within the industry.

AERO 6250 - Airport Policy and Planning
3 credit hours The regulatory agencies of the aviation industry and their functions. Special emphasis on current problems and issues affecting the industry.

AERO 6270 - Airport Design
3 credit hours Introduces the concepts of airport planning, design, and layout with particular emphasis on community characteristics and resource allocation. Students will become familiar with the Federal Aviation Administration's role in the airport design process.

AERO 6310 - Introduction to Aviation Security
3 credit hours An overview of the aviation security system in the United States, including airport, aircraft operator, and general aviation perspectives. History and development of aviation security along with the role of government in aviation security discussed.

AERO 6320 - Aviation Security II
3 credit hours Prerequisite: AERO 6310. Provides an in-depth analysis of aviation security including U.S. policy and strategy, passenger and baggage screening, in-flight security, and airport security.

AERO 6330 - International Aviation Systems
3 credit hours An in-depth analysis of international aviation with particular attention to U.S. aviation interface. Areas covered include the air traffic control systems, bilateral agreements, nationalized vs. privately owned carriers, ETOPS restrictions, marketing and operational difficulties, etc.

AERO 6350 - General Aviation
3 credit hours Operations, supervision, and the role of administration in the general aviation industry.

AERO 6370 - Aviation Contracts and Leases
3 credit hours An examination of the various agreements utilized by airports to define the terms and conditions for airlines, FBOs, concessionaires, air cargo operators, and other airport tenants. Analysis of the general provisions and requirements contained within airport leases and those specific to each tenant. A review of airport lease administration and compliance procedures.

AERO 6420 - Aviation Safety Investigation
3 credit hours Prerequisite: Graduate standing in Aerospace or permission of department. Acquaints students with skills and procedures used in aviation accident and incident investigation. Exposure to accident investigation management techniques, the information collection process, interviewing procedures, human factors, safety analysis, and investigation reporting. Emphasis placed on using safety investigation data to develop safety improvements.

AERO 6430 - Human Factors in Aviation
3 credit hours Prerequisite: Graduate standing in Aerospace or permission of department. Comprehensive look at how human physiology and psychology affect aviation operations. Emphasis placed on how these factors can lead to aviation accidents and the development of safety systems to mitigate human error.

AERO 6441 - Applied Research Capstone Project
3 credit hours Prerequisites: AERO 6610 and AERO 6611. Culminating experiences for M.S. in Aeronautical Science candidates desiring professional careers in the aviation industry (non-thesis option). Involves an independently designed investigation of contemporary issues within the aviation industry. Appropriate research methodologies as well as completion of a final project report and presentation required.

AERO 6450 - Airport Funding Policy
3 credit hours Airport subsidy funding by the local, state, and federal governments and their essential components as applied to local airports. Procedures necessary to obtain government funding and grants available for building new facilities and repairing existing buildings.

AERO 6540 - Topics in Aerospace Education
1 to 3 credit hours (Same as YOED 6540.) Content varies with needs of individual students who are interested in making a specialized study of current problems in the field of aerospace education.

AERO 6610 - Introduction to Aerospace Research
3 credit hours Emphasis on research as a significant component of graduate study to include methods, procedures, style, and form.

AERO 6611 - Applied Statistics in Aerospace Research
3 credit hours Prerequisite: AERO 6610 with minimum grade of C. Designed to integrate statistics and complement AERO 6610. Introduction to inferential statistics, including parametric and nonparametric, and descriptive statistics using specific examples from research in aerospace. Only statistics most commonly used in aerospace/aviation will be covered. General objective is to help students understand applied statistics; specific objective is to show students how to apply statistics specific for research designs used in aerospace/aviation.

AERO 6640 - Thesis Research
1 to 6 credit hours Prerequisite: AERO 6610. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

AERO 6700 - Advanced Aviation Education Workshop
3 credit hours (Same as YOED 6700.) Second course in aviation education offered through a grant

from the Tennessee Department of Transportation (TDOT) to Tennessee educators; designed to provide K-12 educators aviation education classroom strategies and materials. Includes an aircraft cross-country flight and a field trip.

AERO 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Agriculture

Jessica Carter, Director
(615) 898-2523
www.mtsu.edu/abas/

The School of Agriculture offers the Master of Science (M.S.) in Horse Science with concentrations in Equine Education, Equine Physiology, and Industry Management and a minor in Agriculture. The school also offers courses for the Master of Professional Science with a concentration in Fermentation Science and the Master of Education in Administration and Supervision with a concentration in Agricultural Education Leadership.

Agriculture Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Horse Science, Equine Education Concentration, M.S.

Holly Spooner, Program Director
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The School of Agriculture offers the Master of Science (M.S.) in Horse Science, designed to prepare graduates for the multifaceted equine industry. Students may choose one of three concentrations: Equine Education, Equine Physiology, or Industry Management.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores or scores on the Miller Analogies Test (MAT), undergraduate and graduate grade point average, letters of recommendation, and a personal interview.

Applicants who do not meet admission requirements but whose overall record indicates the potential for success may be considered for non-degree admission. Students must meet all conditions established by the Horse Science Graduate Committee in order to gain full acceptance to the program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

The application deadline is April 15 for those wishing to be considered for graduate assistantships and admission in the Summer or Fall. October 1 is the application deadline for admission in the Spring. Applications will be accepted after these dates, but admission consideration is not guaranteed.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. program in Horse Science;
3. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT). Successful applicants typically have GRE Verbal and Quantitative scores exceeding 146 and 140 respectively, with a total combined score that exceeds 286 or a score above 385 on the MAT;
4. submit official transcripts of previous college work reflecting a 3.00 GPA from a minimum of 12 credit hours of upper-division, undergraduate animal science and/or equine science courses or equivalent industry experience as approved by the Horse Science Graduate Committee;
5. submit a letter of intent that addresses the following:
    a. In 500 words or less, applicant should describe his/her horse experience to date (which may include but is not limited to college coursework, club/team involvement, breed/discipline groups, etc.) as well as other experiences which may have impacted the decision to pursue this degree; and
    b. In 500 words or less, applicant should describe future plans and goals as they relate to obtaining an M.S. in Horse Science degree;
6. after application review, participate in an invited interview with the Horse Science Graduate Committee at the applicant's expense before final acceptance into the program.

Degree Requirements

The Master of Science in Horse Science with a concentration in Equine Education requires completion of a minimum of 36 semester hours.

Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice) during the semester in which the candidate intends to graduate;
2. successfully complete and defend a thesis or equine experiential learning project; students have the option to conduct and complete a traditional research-based thesis project or to select a more contemporary non-thesis option.

All students in the graduate program will be expected to complete a minimum of two consecutive semesters of full-time study in residence at MTSU.

Curriculum: Horse Science, Equine Education

The Equine Education concentration offers a skill set needed to teach and provide instruction at a postsecondary equine program or leadership within the Cooperative Extension Service. Students in the Equine Education concentration have the option to conduct and complete a traditional, research-based thesis project or to select a more contemporary non-thesis option.

The following illustrates the minimum 36-hour coursework requirements.

Thesis Option (36 hours)

Core Courses (15 hours)

- ANSC 5420 - Animal Breeding and Genetics **3 credit hours**
- AGRI 6000 - Research Methods in Agricultural Science **3 credit hours**
- AGRI 6100 - Graduate Seminar in Agriculture **1 credit hours**
- HORS 6170 - Issues in the Equine Industry **2 credit hours**
- HORS 6440 - Advanced Equine Nutrition **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**

Required Courses (12 hours)

- HORS 6250 - Coaching and Teaching for Equine Competition **3 credit hours**
- LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services **3 credit hours**
- LSM 6730 - Socio-Cultural and Ethical Issues in Leisure and Sport **3 credit hours**
- AGRI 6640 - Thesis Research **1 to 6 credit hours (3 credit hours minimum)**

Electives (9 hours)

In consultation with their committees, students must select a minimum 9 hours from graduate-level courses within the College of Basic and Applied Sciences, the College of Behavioral and Health Sciences, and/or the Jones College of Business. Of these, a minimum of 6 hours must be taken from courses with similar content rubrics (i.e., MKT, MGMT, LSM, ABAS, etc.). Students are limited to 3 hours at the 5000 level.

Non-thesis Option (36 hours)

Core Courses (15 hours)

- ANSC 5420 - Animal Breeding and Genetics **3 credit hours**
- AGRI 6000 - Research Methods in Agricultural Science **3 credit hours**
- AGRI 6100 - Graduate Seminar in Agriculture **1 credit hours**
- HORS 6170 - Issues in the Equine Industry **2 credit hours**
- HORS 6440 - Advanced Equine Nutrition **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**

Required Courses (12 hours)

- HORS 6250 - Coaching and Teaching for Equine Competition **3 credit hours**
- LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services **3 credit hours**
- LSM 6730 - Socio-Cultural and Ethical Issues in Leisure and Sport **3 credit hours**
- HORS 6540 - Equine Experiential Learning **1 to 6 credit hours (3 credit hours minimum)**

Electives (9 hours)

In consultation with their committees, students must select a minimum 9 hours from graduate-level courses within the College of Basic and Applied Sciences, the College of Behavioral and Health Sciences, and/or the Jones College of Business. Of these, a minimum of 6 hours must be taken from courses with similar content rubrics (i.e., MKT, MGMT, LSM, ABAS, etc.). Students are limited to 3 hours at the 5000 level.

Horse Science, Equine Physiology Concentration, M.S.

Holly Spooner, Program Director
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The School of Agriculture offers the Master of Science (M.S.) in Horse Science, designed to prepare graduates for the multifaceted equine industry. Students may choose one of three concentrations: Equine Education, Equine Physiology, or Industry Management.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores or scores on the Miller Analogies Test (MAT), undergraduate and graduate grade point average, letters of recommendation, and a personal interview.

Applicants who do not meet admission requirements but whose overall record indicates the potential for success may be considered for non-degree admission. Students must meet all conditions established by the Horse Science Graduate Committee in order to gain full acceptance to the program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

The application deadline is April 15 for those wishing to be considered for graduate assistantships and admission in the Summer or Fall. October 1 is the application deadline for admission in the Spring. Applications will be accepted after these dates, but admission consideration is not guaranteed.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. program in Horse Science;
3. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT). Successful applicants typically have GRE Verbal and Quantitative scores exceeding 146 and 140 respectively, with a total combined score that exceeds 286 or a score above 385 on the MAT;
4. submit official transcripts of previous college work reflecting a 3.00 GPA from a minimum of 12 credit hours of upper-division, undergraduate animal science and/or equine science courses or equivalent industry experience as approved by the Horse Science Graduate Committee;
5. submit a letter of intent that addresses the following:
    a. In 500 words or less, applicant should describe his/her horse experience to date (which may include but is not limited to college coursework, club/team involvement, breed/discipline groups, etc.) as well as other experiences which may have impacted the decision to pursue this degree; and
    b. In 500 words or less, applicant should describe future plans and goals as they relate to obtaining an M.S. in Horse Science degree;
6. after application review, participate in an invited interview with the Horse Science Graduate Committee at the applicant's expense before final acceptance into the program.

Degree Requirements

The Master of Science in Horse Science with a concentration in Equine Physiology requires completion of a minimum of 36 semester hours.
Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice) during the semester in which the candidate intends to graduate;
2. successfully complete and defend a thesis project.

All students in the graduate program will be expected to complete a minimum of two consecutive semesters of full-time study in residence at MTSU.

Curriculum: Horse Science, Equine Physiology

The Equine Physiology concentration emphasizes an interdisciplinary, science-based curriculum structured to build knowledge of scientific principles and apply them to a thesis research project related to equine science.
The following illustrates the minimum 36-hour coursework requirements.

Thesis Option (36 hours)

Core Courses (15 hours)

- ANSC 5420 - Animal Breeding and Genetics **3 credit hours**
- AGRI 6000 - Research Methods in Agricultural Science **3 credit hours**
- AGRI 6100 - Graduate Seminar in Agriculture **1 credit hours**
- HORS 6170 - Issues in the Equine Industry **2 credit hours**
- HORS 6440 - Advanced Equine Nutrition **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**

Required Courses (21 hours)

- HORS 6090 - Equine Reproductive Physiology **3 credit hours**
- AGRI 6640 - Thesis Research **1 to 6 credit hours (3 credit hours minimum)**
- Electives to be selected in consultation with the advisor (**6 credit hours**)
- BIOL 5170 - Endocrinology **3 credit hours**
- CHEM 6500 - Biochemistry I **3 credit hours**

- STAT 6602 - Problems in Statistics-Regression Analysis **3 credit hours** OR
- STAT 6603 - Problems in Statistics-Nonparametric Statistics **3 credit hours** OR
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours** OR
- STAT 6605 - Problems in Statistics-SAS Programming **1 to 9 credit hours (3 credit hours)**

Non-thesis Option (36 hours)

Core Courses (15 hours)

- ANSC 5420 - Animal Breeding and Genetics **3 credit hours**
- AGRI 6000 - Research Methods in Agricultural Science **3 credit hours**
- AGRI 6100 - Graduate Seminar in Agriculture **1 credit hours**
- HORS 6170 - Issues in the Equine Industry **2 credit hours**
- HORS 6440 - Advanced Equine Nutrition **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**

Required Courses (21 hours)

- BIOL 5170 - Endocrinology **3 credit hours**
- CHEM 6500 - Biochemistry I **3 credit hours**
- HORS 6090 - Equine Reproductive Physiology **3 credit hours**
- HORS 6540 - Equine Experiential Learning **1 to 6 credit hours (3 credit hours minimum)**
- Electives to be selected in consultation with the advisor **(6 credit hours)**

- STAT 6602 - Problems in Statistics-Regression Analysis **3 credit hours** OR
- STAT 6603 - Problems in Statistics-Nonparametric Statistics **3 credit hours** OR
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours** OR
- STAT 6605 - Problems in Statistics-SAS Programming **1 to 9 credit hours (3 credit hours)**

Horse Science, Industry Management Concentration, M.S.

Holly Spooner, Program Director
(615) 494-8849
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The School of Agriculture offers the Master of Science (M.S.) in Horse Science, designed to prepare graduates for the multifaceted equine industry. Students may choose one of three concentrations: Equine Education, Equine Physiology, or Industry Management.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores or scores on the Miller Analogies Test (MAT), undergraduate and graduate grade point average, letters of recommendation, and a personal interview.

Applicants who do not meet admission requirements but whose overall record indicates the potential for success may be considered for non-degree admission. Students must meet all conditions established by the Horse Science Graduate Committee in order to gain full acceptance to the program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

The application deadline is April 15 for those wishing to be considered for graduate assistantships and admission in the Summer or Fall. October 1 is the application deadline for admission in the Spring. Applications will be accepted after these dates, but admission consideration is not guaranteed.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. program in Horse Science;
3. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT). Successful applicants typically have GRE Verbal and Quantitative scores exceeding 146 and 140 respectively, with a total combined score that exceeds 286 or a score above 385 on the MAT;
4. submit official transcripts of previous college work reflecting a 3.00 GPA from a minimum of 12 credit hours of upper-division, undergraduate animal science and/or equine science courses or equivalent industry experience as approved by the Horse Science Graduate Committee;
5. submit a letter of intent that addresses the following:
    a. In 500 words or less, applicant should describe his/her horse experience to date (which may include but is not limited to college coursework, club/team involvement, breed/discipline groups, etc.) as well as other experiences which may have impacted the decision to pursue this degree; and
    b. In 500 words or less, applicant should describe future plans and goals as they relate to obtaining an M.S. in Horse Science degree;
6. after application review, participate in an invited interview with the Horse Science Graduate Committee at the applicant's expense before final acceptance into the program.

Degree Requirements

The Master of Science in Horse Science with a concentration in Industry Management requires completion of a minimum of 36 semester hours.
Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice) during the semester in which the candidate intends to graduate;
2. successfully complete and defend a thesis project OR equine experiential learning project.

All students in the graduate program will be expected to complete a minimum of two consecutive semesters of full-time study in residence at MTSU.

Curriculum: Horse Science, Industry Management

The curriculum is structured for a specific industry-related career in the Industry Management concentration. Students have the option to conduct and complete a traditional, research-based thesis project or to select a more contemporary non-thesis option.
The following illustrates the minimum 36-hour coursework requirements.

Thesis Option (36 hours)

Core Courses (15 hours)

- ANSC 5420 - Animal Breeding and Genetics **3 credit hours**
- AGRI 6000 - Research Methods in Agricultural Science **3 credit hours**
- AGRI 6100 - Graduate Seminar in Agriculture **1 credit hours**
- HORS 6170 - Issues in the Equine Industry **2 credit hours**
- HORS 6440 - Advanced Equine Nutrition **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**

Required Courses (12 hours)

- HORS 6040 - Management of Equine Events and Facilities **3 credit hours**
- AGRI 6640 - Thesis Research **1 to 6 credit hours (3 credit hours minimum)**

Choose two of the following:

- LSM 6520 - Management Practices in Recreation and Leisure Services **3 credit hours**
- MGMT 6100 - Strategic Decision Making **3 credit hours**
- MGMT 6300 - Not-for-Profit Management and Governance **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- MKT 6810 - Promotional Strategy **3 credit hours**
- MKT 6870 - Techniques in Social Media, Search Engine and Internet Marketing **3 credit hours**
- MKT 6880 - Sport and Entertainment Marketing **3 credit hours**

Electives (9 hours)

In consultation with their committees, students must select a minimum of 9 hours from graduate-level courses in the College of Basic and Applied Sciences, the College of Education, and/or the Jones College of Business. Of these, a minimum of 6 hours must be taken from courses with similar content rubrics (i.e., MKT, MGMT, LSM, ABAS, etc.). Students may take a maximum of 12 hours of electives selected from the MGMT, MKT, and or MC rubrics. Students are limited to 6 hours at the 5000 level.

Non-thesis Option (36 hours)

Core Courses (15 hours)

- ANSC 5420 - Animal Breeding and Genetics **3 credit hours**
- AGRI 6000 - Research Methods in Agricultural Science **3 credit hours**
- AGRI 6100 - Graduate Seminar in Agriculture **1 credit hours**
- HORS 6170 - Issues in the Equine Industry **2 credit hours**
- HORS 6440 - Advanced Equine Nutrition **3 credit hours**
- STAT 6020 - Applied Statistical Methods **3 credit hours**

Required Courses (12 hours)

- HORS 6040 - Management of Equine Events and Facilities **3 credit hours**
- HORS 6540 - Equine Experiential Learning **1 to 6 credit hours (3 credit hours minimum)**

Choose two of the following:

- LSM 6520 - Management Practices in Recreation and Leisure Services **3 credit hours**
- MGMT 6100 - Strategic Decision Making **3 credit hours**
- MGMT 6300 - Not-for-Profit Management and Governance **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- MKT 6810 - Promotional Strategy **3 credit hours**
- MKT 6870 - Techniques in Social Media, Search Engine and Internet Marketing **3 credit hours**
- MKT 6880 - Sport and Entertainment Marketing **3 credit hours**

Electives (9 hours)

In consultation with their committees, students must select a minimum of 9 hours from graduate-level courses in the College of Basic and Applied Sciences, the College of Education, and/or the Jones College of Business. Of these, a minimum of 6 hours must be taken from courses with similar content rubrics (i.e., MKT, MGMT, LSM, ABAS, etc.). Students may take a maximum of 12 hours of electives selected from the MGMT, MKT, and or MC rubrics. Students are limited to 6 hours at the 5000 level.

Agribusiness

AGBS 5130 - Agricultural Marketing and Price Analysis
3 credit hours Prerequisite: ABAS/AGBS 3130 or approval of instructor. Agricultural prices and their relationship to production and marketing. Agricultural marketing systems, functions, institutions, and structural changes.

AGBS 5140 - Economics of Agribusiness Management
3 credit hours Prerequisite: ABAS/AGBS 3130 or approval of instructor. The application of economic concepts to agribusiness firms.

AGBS 5150 - Agricultural Policy
3 credit hours Prerequisite: ABAS/AGBS 3130 or approval of instructor. Agricultural policy in a democratic society; relationship of farm groups to public policy; types of agricultural programs and appraisal of their results.

AGBS 5200 - Fruit and Vegetable Marketing
3 credit hours Prerequisites: PSCI 1030/1031 and BIOL 1030/1031 or approval of instructor. Basic biochemistry of respiration, handling techniques and practices, quality assessment, and marketing of fruit and vegetable crops. Both domestic and international marketing of fruit and vegetable products discussed. Examines economic impact of improper handling on both the local producer and the end user.

AGBS 5830 - Food Quality Control
3 credit hours Prerequisites: PSCI 1030/1031 and BIOL 1030/1031 or approval of instructor. Quality control and sensory evaluation techniques utilized in food processing. Instrumental and physical methods of quality determination of raw and processed food products, hazard analysis and critical control point (HACCP), and quality philosophies employed in the industry. Sensory evaluation techniques and statistical analysis of evaluation results covered.

Agricultural Education

AGED 5210 - Farm Power and Equipment
3 credit hours Gasoline engines with actual work experience in overhaul. Work also with transmissions, hydraulics, braking systems, and other farm equipment including use of shop manuals, operation manuals, and parts books.

AGED 5220 - Methods of Teaching Agriscience and Agricultural Mechanics
3 credit hours Emphasis on performing shop skills such as welding, brazing, electrical wiring, etc.

AGED 5230 - Adult and Youth Leadership Program Development in Agricultural Organizations
3 credit hours Program development in agricultural education and leadership. Conceptual understanding of program evaluation, development, process and practice, application of evaluation design and process for youth and adults in extension, community, and school-based programs.

AGED 6010 - History and Philosophy of Agricultural Education
3 credit hours Explores the nature and history of selected philosophical concepts and philosophers and evaluates their influence upon education and agricultural education in the United States.

AGED 6020 - Principles of Agricultural Leadership
3 credit hours Identifies and defines leadership, as well as identifies styles and roles of leadership. Explores development techniques and skills required in working in and with organizations through reading, observing, applying, creating, and evaluating leadership.

AGED 6030 - Theoretical Foundations of Personal Agricultural Leadership
3 credit hours Introduces theories of teaching and learning and related research. Explores trait, behavioral skills, situational approach, path-goal theory, leader-member theory, and other leadership theories. Explores applications of teaching and learning theory in the context of teaching agricultural subject matter.

AGED 6050 - Leadership Development in Agricultural Organizations
3 credit hours Examines leadership as it related to organizations and their group and team behavior. Identifies styles and roles of leadership, development of leadership techniques and skills required in working in organizations and youth groups, methods of resolving conflict, communicating, guiding and evaluating leadership, and ethical consideration of leaders. Capstone course for the Agricultural Education Leadership concentration.

Agriculture

AGRI 5100 - Microcomputer Applications in Agriculture
3 credit hours Includes use of agricultural software, agricultural communications network, computer daily feeding machines, and farm records.

AGRI 5700 - Agriculture in Our Lives
3 credit hours The national and international importance of U.S. agriculture. Emphasis on food production and marketing, land conservation, and agriculture related recreation. Accepted as a natural science elective for education majors. NO CREDIT GIVEN TOWARD A MAJOR IN THE SCHOOL OF AGRICULTURE.

AGRI 5710 - Agricultural Statistics and Data Analysis
3 credit hours Prerequisites: MATH 1530, MATH 1710, MATH 1720, MATH 1730, or MATH 1910. Focuses on applied statistics and experimental design and analysis in both animal and plant science domains. Topics include agricultural units conversion, descriptive/inferential statistics, experimental design and analysis, agricultural study case analysis.

AGRI 5990 - Seminar
1 credit hours Students required to research and make an oral report on a current agricultural topic.

AGRI 6000 - Research Methods in Agricultural Science
3 credit hours A review of current scientific methods related to experiments in agriculture. Topics include research ethics, welfare of research subjects, literature resources, critical review of scientific literature, experimental design, scientific writing, interpreting data, and data presentation.

AGRI 6100 - Graduate Seminar in Agriculture
1 credit hours Seminar presentations target current issues and research advances in agricultural science and production. Presenters include faculty, graduate students, and outside speakers. Active participation in topic discussions emphasized. May be repeated. S/U grading.

AGRI 6450 - Problems in Agriscience Technologies
3 credit hours Prerequisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION.

AGRI 6451 - Problems in Agriscience Technology-Animal Science
3 credit hours Prerequisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training in advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION. Animal Science.

AGRI 6452 - Problems in Agriscience Technologies-Plant Science
3 credit hours Prerequisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training in advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION. Plant Science.

AGRI 6453 - Problems in Agriscience Technologies-Agricultural Mechanics
3 credit hours Prerequisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training in advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION. Agricultural Mechanics.

AGRI 6454 - Problems in Agriscience Technologies-Agribusiness
3 credit hours Prerequisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training in advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION. Agribusiness.

AGRI 6455 - Problems in Agriscience Technologies-Forestry and Agricultural Products
3 credit hours Prerequisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training in advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION. Forestry and Agricultural Products.

AGRI 6640 - Thesis Research
1 to 6 credit hours Prerequisite: Completion of 24 hours of graduate-level course work. The completion of selected research problem, review of pertinent literature, collection and analysis of data, and preparation of the thesis. S/U grading.

AGRI 6910 - Problems in Agriculture
1 to 6 credit hours Problem or problems selected from one of the major disciplines. May involve conferences with instructor, library work, field study, and/or laboratory activity. Students can take from one to three credits with a maximum of three per semester.

Animal Science

ANSC 5260 - Behavior of Domestic Animals
3 credit hours Behavior aspects of raising and managing domestic animals to include equine, swine, goats, cattle, sheep, dogs, and cats. Communicative, ingestive, sexual, social, aggressive, and abnormal behaviors emphasized.

ANSC 5410 - Animal Nutrition and Feeding
3 credit hours Prerequisites: ABAS/ANSC 1410 and CHEM 1020/1021 or 1120/1121. Gastrointestinal tract, process of digestion, and nutrient utilization. Application of principles of animal nutrition to formulation of supplements and complete rations for livestock.

ANSC 5420 - Animal Breeding and Genetics
3 credit hours Basic principles of genetics, heredity, crossbreeding, inbreeding, and molecular genetics. Animal breeding topics include quantitative traits, prediction of breeding value, methods of selection, and genetic evaluations including genomic-enhanced selection. ***Offered fall only.***

ANSC 5470 - Advanced Beef Production
3 credit hours Prerequisite: ABAS/ANSC 3470 or approval of instructor. In-depth look at various systems of beef production from standpoint of function, economics, and suitability to locale. Extensive field trips to commercial cow-calf, feedlot, performance testing, stocker, and purebred operations.

ANSC 5510 - Domestic Animal Reproductive Physiology
3 credit hours Advanced topics in the anatomy, physiology, and endocrinology of reproduction in domestic livestock species. Topics include male and female physiology and an overview of comparative anatomy and physiology between species. Current technologies and methods in controlling reproduction in livestock species also discussed.

Fermentation Science

FERM 5560 - Applied Fermentation: Biomass and Biofuels
3 credit hours Prerequisites: FERM 1000, CHEM 2030/2031 or CHEM 3010/301,1 and CHEM 3530/3531 or permission of instructor. Survey of fermentation as a means of bioenergy production, downstream processing to purify bioenergy, the range of biofuels produced by various biomass (e.g. grains, algae, and renewable sources) and mathematical evaluation of product recovery and energy balance.

FERM 5570 - Applied Fermentation: Milk, Meat, and Grain
3 credit hours Prerequisites: FERM 1000, CHEM 2030/2031 or CHEM 3010/3011, and CHEM 3530/3531 or permission of instructor. Practical applications of fermentation to produce dairy, meat, and grain products. Lecture and laboratory exercises provide real-world experience in the production of these products.

FERM 5580 - Applied Fermentation: Fruits and Vegetables
3 credit hours Prerequisites: FERM 1000, CHEM 2030 or 3010, and CHEM 3530 or permission of instructor. Practical applications of fermentation to produce fruit and vegetable products. Lecture and laboratory exercises provide real-world experience in the production of these products.

FERM 5610 - Fermentation and Nutraceutical Production
3 credit hours Prerequisites: FERM 1000, BIOL 1120/1121, BIOL 2230/2231, and CHEM 3530/3531. Scientific principles of fermentation employed for the production of value-added, functional food products with specific emphases on bioprocessing, bio-catalysis, and bio-separation.

FERM 6100 - Food Contamination, Safety, and Regulation
3 credit hours Prerequisites: FERM 1000, BIOL 1120/1121, BIOL 2230/2231, and CHEM 3530/3531. Current research in the study of the quality, safety characteristics, and health implications of processed, minimally processed, and raw foods. Topics include novel food processing technologies and microbial detection tools.

FERM 6450 - Industrial Applications of Fermentation
3 credit hours Prerequisites: FERM 1000, CHEM 2030/2031 or CHEM 3010/3011, and CHEM 3530/3531 or permission of instructor. Discussion of industrial applications of fermentation used to produce a broad range of products including medicines, flavors, aromas, pigments, organic acids, and vitamins.

FERM 6600 - Probiotics, Prebiotics, and Bioprocessing
3 credit hours Prerequisites: FERM 1000, BIOL 1120/1121, BIOL 2230/2231, and CHEM 3530/3531. Details on probiotics, prebiotics, their molecular mechanisms, commercial uses, and regulation and safety assessments of the effects of nutraceuticals on humans and animals.

FERM 6700 - Consumer Motivation and Sensory Evaluation of Fermented Foods
3 credit hours Prerequisites: FERM 1000, CHEM 2030/2031 or CHEM 3010/3011, and CHEM 3530/3531 or permission of instructor. Fundamentals of sensory evaluation of food and sensory-driven consumer motivation leading to the purchase of fermented foods. Scientific methods of sensory evaluation introduced and practiced and their use in determining critical factors in consumer purchase decisions discussed.

Horse Science

HORS 5400 - Horsemanship-Equitation
3 credit hours Prerequisite: ABAS/HORS 2400 or approval of instructor. Understanding, recognizing, and producing lateral control in the horse. Lateral exercises; lateral movements; developing lateral balance and control, track, gait, pace, impulsion, and rhythm. Two-hour lecture and two-hour laboratory each week.

HORS 5430 - Horse Production
3 credit hours Prerequisites: HORS 2400, 3040, and one of the following: HORS 3300, 4090, or 4440 or consent of instructor. Scientific principles relevant to production requirements of horses as related to exercise physiology and performance, growth, reproductive physiology and state, age, and clinical support. Facilities management, marketing, legal aspects of horse ownership and career opportunities covered.

HORS 5460 - Care and Training of Horses
3 credit hours Prerequisites: ABAS 2400, 3400, and 4400 or approval of instructor. Theory, fundamentals, and practices of breaking, training, fitting, showing, and the use of light horses for riding and driving, with special emphasis on the Tennessee Walking Horse and the needs of the local area.

HORS 5980 - Seminar in Horse Science
1 credit hours Familiarizes horse science majors with important current scientific investigation in horse science.

HORS 6040 - Management of Equine Events and Facilities
3 credit hours Prerequisite: 12 hours of upper-division HORS courses. Fundamentals of managing equine and other livestock events and facilities. Emphasis placed on active participation in management of equine events held at MTSU facilities.

HORS 6090 - Equine Reproductive Physiology
3 credit hours Prerequisite: ANSC 4510 or HORS 4090 or permission of instructor. Principles of equine reproductive physiology related to management of the stallion, mare, and foal. Topics covered include reproductive anatomy, endocrine regulation of reproduction, molecular mechanisms of hormone action, manipulation of reproductive function, and understanding and implementation of assisted reproductive technology in breeding farm management. Two hours lecture and two-hour laboratory.

HORS 6170 - Issues in the Equine Industry
2 credit hours In-depth look at relevant events affecting the equine industry. Interaction with industry leaders provides a unique window to examine the issues affecting the horse industry. Oral and written reports on specific problems presented. Topics will vary depending upon the current issues important to the equine industry.

HORS 6250 - Coaching and Teaching for Equine Competition
3 credit hours Teaching and coaching successful teams for college or youth equestrian and judging competitions. Utilizes current philosophies of teaching and coaching based on fundamental psychology of personalities and learning. Practice and assisting with teaching and coaching of youth and college teams will be required.

HORS 6440 - Advanced Equine Nutrition
3 credit hours A class in organic chemistry or biochemistry recommended. A biochemical approach to understanding the nutritional requirements for horses at various life stages, including maintenance, growth, reproduction, performance, age, and clinical support. Feeding management related to nutrient digestion, absorption, and metabolism. Current equine nutrition research and its applications to practical equine management emphasized.

HORS 6540 - Equine Experiential Learning
1 to 6 credit hours Prerequisite: Completion of 24 semester hours at the master's level. Practical experience gained while working with an equine-related program emphasizing hands-on involvement. Students will develop, implement, and conclude an applied project in consultation with a faculty member and approved by their committee. S/U grading.

HORS 6550 - Advanced Equine Exercise Physiology
3 credit hours Prerequisite: HORS 4550. Review and evaluation of current research in equine exercise science; physiologic, metabolic, and mental adaptation to athletic training; bioenergetics of muscle metabolism; nutrition of performance horses; management and training approaches to improve performance and delay fatigue in equine athletes.

Plant and Soil Science

PLSO 5310 - Forage Crops
3 credit hours Adaptation, distribution, establishment, management, cultivation, and utilization of forage legumes and grasses.

PLSO 5330 - Turf Management
3 credit hours Prerequisite: PLSO 1610. Establishment and management of turf grasses for lawns, golf courses, and parks.

PLSO 5340 - Genesis of Soil Landscapes
3 credit hours Prerequisite: PLSO 3340 or instructor approval. The co-evolution of soil landscapes, important morphological soil properties, influence of geologic and geomorphic settings on soil development. The role of water in the development of soil horizons. Factors and processes of soil genesis. Lecture/Lab.

PLSO 5350 - Soil Survey and Land Use
3 credit hours Prerequisite: PLSO 3340 or instructor approval. Soil properties used to determine the suitability of soils for various uses; tasks and reports involved in soil survey; Methods of soil evaluation and interpretation. Use of electronic database for land use decisions. Lecture/Lab.

PLSO 5620 - Greenhouse Management
3 credit hours Prerequisite: ABAS/PLSO 1610 or BIOL 1120/1121. Analysis of soils, fertilizers, irrigation techniques, container preparation, ventilation, growth regulation, and carbon dioxide enrichment for greenhouse operation. Two hours lecture and one two-hour lab.

PLSO 5630 - Floriculture
3 credit hours Propagation and other cultural practices for the production and maintenance of plants and flowers in the home. Two hours lecture and one two-hour lab.

PLSO 5640 - Landscaping
3 credit hours Application of the principles of design, the use of proportionate-sized woody landscape plants, and other practices to produce low-maintenance-cost landscapes. One hour lecture and one four-hour lab.

PLSO 5670 - Plant Propagation
3 credit hours Anatomical features and physiological principles involved in propagating plants from seed and by division, cutting, budding, and grafting. Use of growth regulators and environmental factors. Two hours lecture and one two-hour lab.

Biology

Dennis Mullen, Chair
(615) 898-2292
www.mtsu.edu/biology/

The Department of Biology offers a Master of Science in Biology. The department also offers courses in three interdisciplinary Ph.D. program--Molecular Biosciences, Computational Science, and Mathematics and Science Education--and courses in the Master of Science in Professional Science.

Biology, M.S.

Dr. Chris Herlihy
(615) 898-2611
Chris.Herlihy@mtsu.edu

The Department of Biology offers the Master of Science in Biology.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Required application materials include official transcripts, Graduate Record Examination (GRE) scores, three letters of recommendation, and a personal statement.
Students receiving admission typically will have a 3.40 overall (and in biology coursework) undergraduate grade point average and overall GRE scores above the fiftieth percentile.
All students in the graduate program must have an undergraduate minor (19 hours) in biology or its equivalent and 12 hours of chemistry (including one semester of organic chemistry or biochemistry).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applications for admission are accepted year-round; preference for admission will be given to students adhering to the following deadlines: Summer/Fall enrollment, March 1; Spring enrollment, October 1.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE);
3. submit official transcripts of previous college work;
4. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.S. in Biology;
5. submit a personal statement. The personal statement should outline the student's interest in graduate study and indicate a potential area of research interest and thesis advisor.
6. identify a thesis advisor.

Degree Requirements

The Master of Science in Biology requires completion of 30-42 semester hours with at least 21 hours at the 6000 level.
Candidate must

1. complete BIOL 6620 Biological Research and defend the thesis proposal before the end of the end of the second semester of study;
2. successfully complete both written and oral comprehensive examinations (may be taken no more than twice) the semester before graduation;
3. present and successfully defend the thesis in a public forum.

Curriculum: Biology

The following illustrates 30-42 hours of coursework requirements. In addition, a maximum of 15 hours of thesis research may be required to fulfill degree requirements.

Required Courses (6 hours)

- BIOL 6620 - Biological Research **3 credit hours**
- BIOL 6650 - Seminar **1 credit hours**
- BIOL 6660 - Seminar **2 credit hours**
  NOTE: ***Students are expected to complete both seminars during the first year of graduate study.***

Electives (21 hours)

- Must be selected from BIOL courses or other elective courses approved by the thesis advisor and MS program director.

Thesis Research (3-15 hours)

NOTE: ***No more than 15 hours of thesis research may be applied toward degree requirements.***

- BIOL 6640 - Thesis Research **1 to 6 credit hours (3 credit hours required)**

Biology

BIOL 5040 - General Entomology
3 credit hours Prerequisites: BIOL 1110 /1111 and 1120/1121. Structure, classification, evolution, importance, and life history of insects. Five hours lecture/laboratory.

BIOL 5050 - Parasitology
3 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5051. Life histories, host-parasite relationships, and control measures of the more common parasites of humans and domesticated animals. Two lectures and one three-hour laboratory.

BIOL 5051 - Parasitology Lab
0 credit hours Corequisite: BIOL 5050.

BIOL 5130 - Histology
4 credit hours Prerequisites: BIOL 3250/3251; CHEM 2030/2031 or 3010/3011. Corequisite: BIOL 5131. Microscopic anatomy of vertebrate cells, tissues, and organs. Three lectures and one three-hour laboratory.

BIOL 5131 - Histology Lab
0 credit hours Corequisite: BIOL 5130.

BIOL 5140 - Invertebrate Zoology
4 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5141. Structure, functions, life histories, and economic importance of the invertebrate phyla. Laboratory work comprises detailed studies of representative specimens. Three lectures and one three-hour laboratory.

BIOL 5141 - Invertebrate Zoology Lab
0 credit hours Corequisite: BIOL 5140.

BIOL 5170 - Endocrinology
3 credit hours Prerequisites: BIOL 3250/3251, 4110/4111, or 2020/2021; CHEM 2030/2031 or 3010/3011. Structure, function, and integrative mechanisms of vertebrate endocrine organs, with additional attention to invertebrate hormones. Three lectures.

BIOL 5180 - Vertebrate Zoology
4 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5181. Structure, life history, and classification of fish, amphibians, reptiles, birds, and mammals. Local representatives emphasized. Three lectures and one three-hour laboratory.

BIOL 5181 - Vertebrate Zoology Lab
0 credit hours Corequisite: BIOL 5180.

BIOL 5220 - Ichthyology
4 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5221. The morphology, physiology, taxonomy, and ecology of fishes. Three lectures and one three-hour laboratory.

BIOL 5221 - Ichthyology Lab
0 credit hours Corequisite: BIOL 5220.

BIOL 5260 - Nature Study
3 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121. Identification of local plants and animals and a consideration of the ecological principles governing them. Four hours lecture/laboratory.

BIOL 5320 - Seminar: Advancements in Biology
2 credit hours A broad overview of biological principles and recent research developments. Two lectures.

BIOL 5330 - Biome Analysis
1 to 4 credit hours Prerequisite: Permission of department. An intensive classroom and on-site study of a specific biome with special emphasis on data collection and analysis. Consult department head for specific credits and costs.

BIOL 5390 - Ethology
4 credit hours Prerequisite: BIOL 1110/1111. Corequisite: BIOL 5391. Innate and learned animal behavior in primitive and advanced animals including behavior associated with space, reproduction, and food getting. Three lectures and one three-hour laboratory.

BIOL 5391 - Ethology Lab
0 credit hours Corequisite: BIOL 5390.

BIOL 5420 - Plant Ecology and Evolution
4 credit hours Prerequisites: BIOL 1110/BIOL 1111, BIOL 1120/BIOL 1121, and BIOL 3250/BIOL 3251 (or permission of department). Major themes in the ecology and evolution of plants. Topics include how plants sense, respond, and adapt to their environment; life history; species; and patterns of

diversity and abundance of plants. Three hours lecture and one three-hour laboratory.

BIOL 5460 - Human Genetics
3 credit hours Prerequisite: BIOL 3250/3251. Corequisite: BIOL 5461. Application of the fundamental laws of inheritance to humans. Two lectures and one two-hour laboratory.

BIOL 5461 - Human Genetics Lab
0 credit hours Corequisite: BIOL 5460.

BIOL 5500 - Plant Physiology
4 credit hours Prerequisites: BIOL 3250/3251; CHEM 2030/2031 or 3010/3011. Plant growth; development and metabolism at the cellular and whole plant levels. Six hours lecture/laboratory.

BIOL 5510 - Food and Industrial Microbiology
4 credit hours Prerequisite: BIOL 2230/2231. Corequisite: BIOL 5511. Interaction between microorganisms and food; industrial processes of human importance .Three hours lecture and two 1.5 hour laboratory meetings per week.

BIOL 5511 - Food and Industrial Microbiology Lab
0 credit hours Corequisite: BIOL 5510

BIOL 5520 - Plant Anatomy
4 credit hours Prerequisite: BIOL 1120/1121. Plant cells, tissues, and organs. Emphasis on the survival value of the plant's various structural features. Six hours lecture/laboratory.

BIOL 5540 - Topics in Environmental Education
1 to 4 credit hours Prerequisite: Junior standing or above. An intensive classroom and field study of natural science and resources in Tennessee. Special emphasis on data collection, analysis, and problem solving. Target groups are graduate students and upper-division undergraduates in the areas of biology and education. Consult the department chair for specific credits and costs. This course will not apply to the biology major or minor.

BIOL 5550 - Biotechnology
3 credit hours Prerequisites: BIOL 2230/2231 and senior/graduate level. Instruction in both theory and application of current research methodologies in biology and molecular biology. Topics include immunochemistry, polymerase chain reaction, restriction enzyme analysis, and electrophoresis. Five hours lecture/laboratory.

BIOL 5560 - Neurobiology
4 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5561. Introduces comparative neurobiology. Topics include the basic structure and function of the nerve cell and organization of nervous systems of representative species of invertebrate and vertebrate animals. Three hours lecture and one three-hour laboratory.

BIOL 5561 - Neurobiology Lab
0 credit hours Corequisite: BIOL 5560.

BIOL 5570 - Principles of Toxicology
3 credit hours Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111, 1120/1121, 3010/3011. Corequisite: BIOL 5571. Adverse effects of chemical agents on living organisms; current toxicological techniques in laboratory portion of course. Two hours lecture and one three-hour laboratory.

BIOL 5571 - Principles of Toxicology Lab
0 credit hours Corequisite: BIOL 5570.

BIOL 5580 - Marine Biology
4 credit hours Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111, 1120/1121. Corequisite: BIOL 5581. Biological, chemical, and physical characteristics of major marine environments and their associated flora and fauna. Three lectures and one three-hour laboratory.

BIOL 5581 - Marine Biology Lab
0 credit hours Corequisite: BIOL 5580.

BIOL 5770 - Biostatistical Programming
3 credit hours Prerequisite: BIOL 4350/BIOL 4351 or equivalent; access to Mac or PC laptop must be confirmed. Takes a ground-up approach to teaching the fundamentals of biostatistical analysis using R programming language and RStudio.

BIOL 6070 - Plants and Man
3 credit hours Prerequisite: BIOL 1120/1121. Human dependence on plants emphasized. Topics include origin of agriculture, fruits and nuts, grains and legumes, vegetables, spices and herbs, oils and waxes, medicinal plants, psychoactive plants, beverages, fibers and dyes, tannins, wood and ornamental plants. Three lectures.

BIOL 6080 - Advanced Mycology
4 credit hours Prerequisites: Graduate standing plus BIOL 1120/1121. Corequisite: BIOL 6081. Fungi, with emphasis on taxonomy, morphology, culture, and importance to humans. Three lectures and one three-hour laboratory.

BIOL 6081 - Advanced Mycology Lab
0 credit hours Corequisite: BIOL 6080.

BIOL 6090 - Advanced Forest Ecology
4 credit hours Prerequisites: Graduate standing and a grade of C or better in each of the following: BIOL 3250/3251, BIOL 3400, and BIOL 3500 or permission of instructor. Ecological form and function of forested systems with a particular emphasis on communities of the southeastern U.S. and Tennessee. Topics include dendrology, community assembly and disassembly over time, abiotic and biotic drivers of forest community succession, phylogeography and biogeography, and threats and sustainable practices. Three hours lecture and one three-hour laboratory.

BIOL 6120 - Aquatic Ecology
3 credit hours Physical, chemical, and biotic conditions of freshwater lakes and streams and of population structure and dynamics in these environments. Five hours lecture/laboratory.

BIOL 6130 - Ornithology
3 credit hours Corequisite: BIOL 6131. Structure, taxonomy, natural history, and identification of birds. Emphasizes field work. Two lectures and one three-hour laboratory.

BIOL 6131 - Ornithology Lab
0 credit hours Corequisite: BIOL 6130.

BIOL 6180 - Mammalogy
3 credit hours Corequisite: BIOL 6181. Morphology, physiology, systematics, and the development of mammals. Two lectures and one three-hour laboratory.

BIOL 6181 - Mammalogy Lab
0 credit hours Corequisite: BIOL 6180.

BIOL 6190 - Animal Physiological Ecology
4 credit hours Prerequisites: Graduate standing and one course in either ecology or physiology. A study of how animals function in and respond to their natural environments with special interest at the biochemical, physiological, morphological, and behavioral levels. Topics include allometry, heat transfer, thermoregulation, energetics, blood circulation, respiration, osmoregulation, locomotion, control systems, and sensory perception. Six hours lecture/laboratory.

BIOL 6200 - Speciation
3 credit hours Prerequisite: BIOL 3250/3251. Mutation, natural selection, adaptation, isolating mechanisms, genetic drift, hybridization, ploidy in the process of species formation, and a history of the development and ideas of evolution. Two lectures.

BIOL 6210 - Protozoology
3 credit hours Corequisite: BIOL 6211. Morphology, physiology, reproduction, ecology, taxonomy, and life cycles of the protozoa. Two lectures and one three-hour laboratory.

BIOL 6211 - Protozoology Lab
0 credit hours Corequisite: BIOL 6210.

BIOL 6220 - Herpetology
3 credit hours Prerequisite: BIOL 3400/3401. Corequisite: BIOL 6221. Morphology, natural history, and identification of amphibians and reptiles. Local representatives emphasized. Two lectures and one three-hour laboratory.

BIOL 6221 - Herpetology Lab
0 credit hours Corequisite: BIOL 6220.

BIOL 6250 - Genomics
3 credit hours Prerequisites: BIOL 3250/3251 and STAT 3150 or equivalent courses or consent of instructor. Theory and practice of acquiring and analyzing whole-genome sequences and gene products. Genetic variation and patterns within genetic material and gene products of living organisms investigated. Three hours lecture/problem solving.

BIOL 6270 - Cell Metabolism and Human Disease
3 credit hours (Same as BIOL 7270). Prerequisites: BIOL 4110/4111; CHEM 3010/3011 and CHEM 3530/3531. Metabolic pathways of mammalian cells and the diseases that result from genetic defects that disrupt their normal function.

BIOL 6290 - Advanced Scanning Electron Microscopy
4 credit hours Prerequisite: Permission of instructor. Application of scanning electron microscopy to study

materials with emphasis on theory of scanning electron microscopy and preparation of biological specimens for microscopy. Seven hours lecture/laboratory.

BIOL 6350 - Biostatistical Analysis
4 credit hours Prerequisites: BIOL 3250/3251; MATH 1910. Corequisite: BIOL 6351. Intermediate-level introduction to biostatistical procedures used in research. Three lectures and one three-hour laboratory.

BIOL 6351 - Biostatistical Analysis Lab
0 credit hours Corequisite: BIOL 6350.

BIOL 6360 - Energy Dispersive X-Ray Theory and Analysis
1 credit hours Prerequisite: BIOL 4290 or BIOL 6290. Theory of X-ray analysis and elemental analysis of materials using an energy dispersive X-ray system with scanning electron microscopy. One three-hour laboratory.

BIOL 6380 - Experimental Immunology
4 credit hours Prerequisite: BIOL 2230/2231. Corequisite: BIOL 6381. Mechanisms of immunity including the more recent developments in immunology. Three lectures and one three-hour laboratory.

BIOL 6381 - Experimental Immunology Lab
0 credit hours Corequisite: BIOL 6380.

BIOL 6390 - Advanced Cell and Molecular Biology
3 credit hours Prerequisites: BIOL 2230/2231, BIOL 3250/3251; CHEM 2030/2031 or CHEM 3010/3011. Molecular biology of the cell with emphasis on current experimental techniques. Three lectures.

BIOL 6391 - Advanced Cell and Molecular Biology Lab
0 credit hours Corequisite: BIOL 6390.

BIOL 6410 - Advanced Transmitting Electron Microscopy
4 credit hours Prerequisite: Permission of instructor. Ultrastructure of the cell using basic and specialized techniques. Seven hours lecture/laboratory.

BIOL 6430 - Clinical and Pathogenic Microbiology
4 credit hours Prerequisite: BIOL 2230/2231. Comprehensive coverage of the most recent discoveries and techniques used for the identification of pathogenic organisms and their relationships to disease processes. Six hours lecture/laboratory.

BIOL 6440 - Advanced Virology
4 credit hours Prerequisites: BIOL 2230/2231; CHEM 1110/1111 and 1120/1121. Emphasizes the main virus families and their biochemical composition. Experimental approaches and techniques will be developed in order to identify and manipulate viruses. Six hours lecture/laboratory.

BIOL 6450 - Advancements in Molecular Genetics
4 credit hours Prerequisites: BIOL 2230/2231 and 3250/3251; CHEM 1110/1111 and 1120/1121. Recent advancements in microbial genetics and gene manipulation with emphasis on applications of molecular genetics, including gene regulation and recombinant DNA technology. Six hours lecture/laboratory.

BIOL 6460 - Conservation Biology
4 credit hours Prerequisite: BIOL 3400/3401. Measuring biodiversity: species, ecosystem, and genetic diversity. Topics include conservation ethics, extinctions, habitat degradation, exotic species, and management of populations and ecosystems. Six hours lecture/laboratory.

BIOL 6500 - Special Problems in Biology
1 to 4 credit hours Prerequisite: Permission of department. Plan, implement, and interpret a research problem in some area of biology. Available topics limited to areas of graduate faculty interest and expertise.

BIOL 6590 - Environmental Toxicology
4 credit hours Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111, 1120/1121, and 3010/3011. Ecological effects of chemicals in the environment and techniques currently utilized to assess these effects. Current environmental assessment techniques, including biomonitoring, will be covered in the laboratory. Six hours lecture/laboratory.

BIOL 6620 - Biological Research
3 credit hours Prerequisite: Permission of department. Selection of a research problem, review of pertinent literature, and execution of the research.

BIOL 6640 - Thesis Research
1 to 6 credit hours Prerequisites or corequisites: BIOL 6620 and permission of department. Completion of the research problem begun in BIOL 6620; preparation of the thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. Minimum of three credits required for M.S. degree. S/U grading.

BIOL 6650 - Seminar
1 credit hours Discussion and critical evaluation of the primary scientific literature. Responsible conduct of research topics including data management, publication practices, peer review, and collaborative science emphasized. One two-hour session.

BIOL 6660 - Seminar
2 credit hours Development of written and oral communication skills relevant to obtaining research funding and presenting research results. Responsible conduct of research topics including mentor/trainee relationships, human subjects, animal research, research misconduct, and conflicts of interest emphasized. Two one-hour sessions.

BIOL 6700 - Plant-Animal Interactions
3 credit hours Prerequisite: BIOL 1110/1111, 1120/1121. Corequisite: BIOL 6701. Evolutionary and ecological perspectives on how plants attract and repel symbionts and how those symbionts influence plant fitness. Topics include angiosperm evolution, the coevolution of plants with pollinators, herbivores, mycorrhizae, and N-fixing bacteria, and how plant secondary metabolites facilitate or mitigate these interactions. Two hours lecture and three hours lab.

BIOL 6701 - Plant-Animal Interactions Lab
0 credit hours Corequisite: BIOL 6700.

BIOL 6720 - Advanced Animal Development
4 credit hours Prerequisites: BIOL 3250/3251; BIOL 4210/4211 or BIOL 6390/BIOL 6391 recommended. Corequisite: BIOL 6721. Processes and underlying molecular mechanisms by which a single fertilized egg develops into an adult organism. Focuses on vertebrate development, including insights gained from other model organisms. Three hours lecture and two hours lab.

BIOL 6721 - Advanced Animal Development Lab
0 credit hours Corequisite: BIOL 6720.

BIOL 6730 - Advanced Microbial Physiology and Biochemistry
4 credit hours Prerequisites: BIOL 2230/2231; CHEM 1110/1111, 1120/1121, and 2030/2031 or 3010/3011 or consent of instructor. Survey of the physiology and biochemistry of prokaryotic and eukaryotic microorganisms. Six hours lecture/laboratory.

BIOL 6740 - Brain Development and Learning Disabilities
1 credit hours Prerequisite: Permission of department. Biology and psychology underlying dyslexia and other common learning disabilities encountered in the school setting. Addresses practical classroom applications utilizing this background information. Five three-hour class meetings.

BIOL 6750 - Advanced Plant Biotechnology
4 credit hours Prerequisites: BIOL 1110/1111, 1120/1121, 3250/3251. Processes and reasoning behind the human manipulation of plant species for agricultural and technological purposes. Topics include traditional breeding techniques, tissue culture, plant cell transformation, and general plant molecular biology techniques as well as current debate over genetically modified organisms. Six hours lecture/laboratory.

BIOL 6760 - Bioinformatics
4 credit hours Prerequisites: BIOL 1110/1111 and 1120/1121 and CSCI 1170 or consent of instructor. Explores the emerging field of bioinformatics which involves the application of computer science to biological questions. Bioinformatics applies to the computational aspects of data gathering, processing, storage, analysis, and visualization methods used in revising and testing biological hypotheses. Student should have a strong background in either computer science or biology, be willing to learn about the other field in an accelerated fashion, and be willing to work cooperatively as part of an interdisciplinary team. Four hours of lecture/problem solving per week.

BIOL 6770 - Issues in Biotechnology
2 credit hours Prerequisite: BIOL 4550/4551, BIOL 5550/5551, or 4750/BIOL 6750. Explores current and emerging issues in biotechnology. Students will be asked to solve problems drawn from biotechnology industry. Seminars, field trips, and case study work.

BIOL 6780 - Principles of Systematics
4 credit hours Prerequisites: BIOL 3250/3251 and 3500. Theory and practice of biological systematics. Concepts of characters and taxa, methods of phylogenetic inference, and applications of systematic data addressed. Five hours lecture, discussion, and laboratory exercises.

BIOL 6850 - Intermediate Life Science
3 credit hours Prerequisite: Permission of instructor and one undergraduate biology course. Uses a process-oriented approach to the study of life science with emphasis on execution and analysis of content-based activities and experiments suited to actual classroom situations. (May not be used for biology majors or minors.)

BIOL 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

BIOL 7010 - Analysis of Genetic Markers
4 credit hours Prerequisites: BIOL 3500 and BIOL 6350/BIOL 6351 or STAT 6020. Overview of the use of genetic markers to answer ecological and evolutionary questions. Applications of phylogenetics, population genetics, and identification of individuals. Labs integrated with lectures to cover major algorithms and software. Four hours of lecture/problem solving per week.

BIOL 7250 - Genomics
3 credit hours Prerequisites: BIOL 3250/3251 and STAT 3150 or equivalent courses or consent of instructor. Theory and practice of acquiring and analyzing whole-genome sequences and gene products. Genetic variation and patterns within genetic material and gene products of living organisms investigated. Three hours lecture/problem solving.

BIOL 7270 - Cell Metabolism and Human Disease
3 credit hours Prerequisites: BIOL 4110/4111; CHEM 3010/3011 and CHEM 3530/3531. Provides a detailed overview of the major metabolic pathways in humans and explores how dysfunction of these pathways, through genetic mutation or other means, leads to disease. Three hours lecture/case study-based problem solving per week.

BIOL 7800 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching.

BIOL 7810 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching.

BIOL 7850 - Intermediate Life Science
3 credit hours Prerequisite: Permission of instructor and one undergraduate biology course. Uses a process-oriented approach to the study of life science with emphasis on execution and analysis of content-based activities and experiments suited to actual classroom situations. (May not be used for biology majors or minors.)

BIOL 7900 - Teaching and Learning Biology
3 credit hours Prerequisite: Permission of instructor. Overview of biology education with an emphasis on how students learn biology and current best practices for teaching biological concepts. Primary literature of the field featured as course emerges through lectures, discussion, small group activities, and group/individual presentations. Capstone experience will be student's development of an instructional unit of study including the formal teaching of selected biological concepts. Three hours lecture/discussion.

Chemistry

Andrienne Friedli, Interim Chair
(615) 898-2956
www.mtsu.edu/chemistry/

The Department of Chemistry offers a Master of Science degree with a major in Chemistry. The department also participates in the interdisciplinary Ph.D. programs in Computational Science, Molecular Biosciences, and the Mathematics and Science Education Chemical Education concentration. Also offered is a minor in Chemistry at the graduate level.

Chemistry Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Chemistry, M.S.

Charles Chusuei, Program Director
(615) 898-2079
Charles.Chusuei@mtsu.edu

The Department of Chemistry offers a Master of Science degree with a major in Chemistry. The department also participates in the interdisciplinary Ph.D. programs in Computational Science, Molecular Biosciences, and the Mathematics and Science Education Chemical Education concentration. Also offered is a minor in Chemistry at the graduate level.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applications for admission are considered year-round with preference being given to students who apply by the following deadlines: March 1 for Summer/Fall, and October 1 for Spring.

Admissions are based on a comprehensive assessment of a candidate's qualifications including a satisfactory score on the Graduate Record Examination (GRE) and undergraduate and graduate grade point average.

An applicant must have an undergraduate minor in chemistry or its equivalent at time of admission.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Science in Chemistry requires a minimum of 30-43 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate.

Candidate must

1. prepare an annual plan of study for the following twelve months with the academic advisor;
2. successfully complete and present an original thesis approved by the student's advisory committee;
3. successfully complete a comprehensive examination in conjunction with the defense of the thesis (may be taken no more than twice).

Curriculum: Chemistry

The following illustrates the minimum coursework requirements. In addition, a maximum of 19 hours of thesis research may be required to fulfill degree requirements.

Required Courses (17 hours)

- CHEM 6100 - Intermediate Organic Chemistry **3 credit hours**

- CHEM 6230 - Intermediate Analytical Chemistry **4 credit hours** * AND
- CHEM 6231 - Intermediate Analytical Chemistry Lab **0 credit hours**

- CHEM 6300 - Intermediate Physical Chemistry **3 credit hours**
- CHEM 6400 - Intermediate Inorganic Chemistry **3 credit hours**
- CHEM 6800 - Thesis Defense **1 credit hours**
- CHEM 6870 - Chemistry Research **3 credit hours**
  **** Quantitative Analysis is a prerequisite for this course; can be taken for undergraduate credit after admission.***
  NOTE: Exceptionally well-prepared students may substitute another approved graduate chemistry course in the same area for the core course by successful performance on a proficiency examination in that core curriculum area.

Electives (5-7 hours)

Complete 5-7 credit hours (maximum of 7) of additional approved chemistry graduate courses or approved cognate courses in biology, mathematics, computer science, or physics.

Thesis Research (8-19 hours)

NOTE: ***No more than 19 hours of thesis research may be applied toward degree requirements.***

- CHEM 6640 - Thesis Research **1 to 6 credit hours**

Chemistry

CHEM 5100 - Organic Spectroscopy
3 credit hours
Prerequisite: CHEM 3020 or equivalent. Theory of and practice in the interpretation of mass, infrared, Raman, ultraviolet-visible, and nuclear magnetic resonance spectra. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5330 - Physical Chemistry Fundamentals
4 credit hours
Modern physical chemistry including current theories of atomic and molecular structures, chemical thermodynamics, electrochemistry, chemical kinetics, and related theoretical topics. Three lectures and one three-hour laboratory period. Offered every year.
NOTE: ***Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.***

CHEM 5331 - Physical Chemistry Fundamentals Lab
0 credit hours
Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5340 - Physical Chemistry Fundamentals
4 credit hours
Modern physical chemistry including current theories of atomic and molecular structures, chemical thermodynamics, electrochemistry, chemical kinetics, and related theoretical topics. Three lectures and one three-hour laboratory period. Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5341 - Physical Chemistry Fundamentals Lab
0 credit hours
Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5350 - Physical Chemistry
4 credit hours
Quantitative principles of chemistry involving extensive use of calculus. Major topics include thermodynamics, phase changes, chemical equilibria, electrochemistry, reaction kinetics, quantum chemistry, molecular structure, and statistical mechanics. Three lectures and one three-hour laboratory period. Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5351 - Physical Chemistry Lab
0 credit hours
Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5360 - Physical Chemistry
4 credit hours
Quantitative principles of chemistry involving extensive use of calculus. Major topics include thermodynamics, phase changes, chemical equilibria, electrochemistry, reaction kinetics, quantum chemistry, molecular structure, and statistical mechanics. Three lectures and one three-hour laboratory period. Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5361 - Physical Chemistry Lab
0 credit hours
Offered every year.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5400 - Inorganic Chemistry
3 credit hours
Basic concepts and theories of inorganic chemistry and how these are used to predict and understand the physical and chemical properties of compounds of the elements other than carbon. Inorganic compounds in the air, water, earth, and in the laboratory, and in biochemistry, geochemistry, and industrial materials and processes. Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5600 - Introduction to Environmental Chemistry
3 credit hours
Introduces major environmental issues including climate change, water quality, air pollution, landfills, hazardous wastes, fossil fuels, and alternative energy. Explores the quality of the environment and the changes in the environment due to contamination. Offered every fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5630 - Detection of Chemical Pollutants
4 credit hours
Theory and practice of analytical chemistry methods used in pollution measurement. Three lectures and one three-hour laboratory period. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5631 - Detection of Chemical Pollutants Lab
0 credit hours
Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5700 - Polymers, an Introduction
3 credit hours
Structure, properties, and applications of polymers. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5730 - Advanced Physical Chemistry
4 credit hours
Modern chemical concepts and computations applied to quantum chemistry, molecular spectroscopy, and statistical thermodynamics. Three lectures and one three-hour calculation laboratory period. Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 5731 - Advanced Physical Chemistry Lab
0 credit hours
Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6100 - Intermediate Organic Chemistry
3 credit hours
Prerequisite: CHEM 3020/3021 or 2030/2031 or equivalent. Concepts and modern theories of organic chemistry: stereochemistry of reactions, mechanistic interpretation of organic reactions, and multistep synthesis. Offered every fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as

listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6110 - Topics in Organic Chemistry
3 to 6 credit hours
Prerequisite: CHEM 6100. A selection of modern topics. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6150 - Bioorganic Chemistry
3 credit hours
Prerequisite: CHEM 3020 or equivalent. Focuses on the structure and function of bioorganic molecules (i.e., peptides, proteins, nucleic acids, carbohydrates, and peptidomimetics), similarities between enzymatic reactions and bench-top organic reactions, and the techniques and instrumentation used to study bioorganic molecules.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6200 - Topics in Analytical Chemistry
3 to 6 credit hours
Prerequisite: CHEM 4230/4231 or CHEM 6230/CHEM 6231. Selected topics of major interest in chemical analysis. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6230 - Intermediate Analytical Chemistry
4 credit hours
Prerequisite: CHEM 2230/2231 or equivalent. Selected instrumental methods of analysis including but not limited to gas and liquid chromatography methods; ultraviolet, visible, and infrared spectroscopic methods; and flame emission and atomic absorption spectrometry. Three lectures and one three-hour laboratory period. Offered every spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6231 - Intermediate Analytical Chemistry Lab
0 credit hours
Offered every spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6300 - Intermediate Physical Chemistry
3 credit hours
Key concepts from classical thermodynamics, quantum theory, and chemically relevant spectroscopies. Statistical thermodynamics introduced. Offered every spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6310 - Modeling Organic and Biological Molecules
3 credit hours Prerequisites: CHEM 3010/CHEM 3011 and CHEM 3020/CHEM 3021 or permission of instructor. Basic concepts of molecular modeling and utilization of corresponding visualization and computation software tools with applications to organic and biological molecules. Students should bring their own problems related to research interests to model.

CHEM 6400 - Intermediate Inorganic Chemistry
3 credit hours
Concepts of inorganic chemistry needed for effective teaching of general chemistry and for safe and effective use of inorganic chemicals and materials in industrial and academic laboratories; atomic theory, principles of inorganic reactivity in acid-base; precipitation, complexation, and oxidation-reduction reactions; crystal and ligand field theory; symmetry; molecular orbital theory; organometallic chemistry. Offered every fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6410 - Transition Metal and Theoretical Inorganic Chemistry
3 credit hours
Prerequisite: CHEM 5400 or consent of instructor. The chemistry of transition metal complexes, organometallic compounds, and of related compounds, their practical applications, and modern theoretical treatments of this chemistry. Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6420 - Topics in Inorganic Chemistry
3 to 6 credit hours
Prerequisite: CHEM 6400. Selected topics of current interest in inorganic chemistry such as organo-metallic chemistry, inorganic materials science, and kinetics and mechanisms of inorganic reactions. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6480 - Laboratory in Inorganic Chemistry-Inorganic Synthetic Methods
1 credit hours
Prerequisite or corequisite: CHEM 6400 or consent of instructor. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6490 - Laboratory in Inorganic Chemistry-Physical Methods in Inorganic Chemistry
1 credit hours
Prerequisite or corequisite: CHEM 6420 or CHEM 5700 or consent of instructor. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6500 - Biochemistry I
3 credit hours
Chemical properties of biological molecules such as proteins, lipids, nucleotides, and carbohydrates. Chemical basis of enzyme catalysis. Structure of biological membranes. Offered every fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6510 - Biochemistry II
3 credit hours
Prerequisite: CHEM 6500. The structure of lipids, amino acids, nucleotides, and nucleic acids and their metabolism at a molecular level. Emphasis on understanding the chemical basis of biological phenomena. Three hours lecture per week. Offered every spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6520 - Topics in Biochemistry
3 credit hours
Prerequisite: CHEM 6500 or CHEM 6510 or consent of instructor. Selected topics of particular interest in biochemistry. Offered every spring. Can be repeated provided that the course topic is different.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6530 - Biochemical Techniques
2 credit hours
Prerequisite/corequisite: CHEM 6500 or CHEM 6510 or consent of instructor. Laboratory in biochemical techniques with emphasis on protein purification, enzyme kinetics, carbohydrate and lipid analysis, and manipulation of DNA. Offered every spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6540 - Foundations of Enzymology
3 credit hours Prerequisite: CHEM 6500. Structure, function, and properties of protein- and ribonucleic acid-based enzymes. Chemical basis for catalysis and the methods used to study enzymes. Examples drawn from the literature to illustrate application of course material to disease.

CHEM 6610 - Environmental Chemistry
3 credit hours
Fundamental chemical principles applied to the fate and behavior of contaminants in soil-water environments. Explores important toxins and explains their movement and occurrence in ecosystems based on chemical and physical parameters. Topics will include pesticides, dioxin, mercury, and bioaccumulation.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6640 - Thesis Research
1 to 6 credit hours
Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading. Offered every term.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6720 - Topics in Physical Chemistry
3 to 6 credit hours
Prerequisite: CHEM 6300 or permission of department. Advanced theories of, latest literature in, and unsolved problems of a particular research area in physical chemistry selected by the professor. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6780 - Polymer and Materials Chemistry Laboratory
2 credit hours
Prerequisite: CHEM 6100 or previous undergraduate organic chemistry knowledge; corequisite: CHEM 5700; CHEM 5330/CHEM 5331 strongly recommended. Laboratory experiments introduce synthesis techniques, kinetics, characterization, engineering, and application of polymers and other modern materials. Six hours of laboratory.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6800 - Thesis Defense
1 credit hours
Required of graduate students specializing in chemistry. Scientific articles reviewed and reports on individual research projects presented. Offered every term.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 6870 - Chemistry Research
3 credit hours
Original laboratory problem that will furnish material for a thesis. Offered every fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7110 - Advanced Topics in Organic Chemistry
3 credit hours
Prerequisite: CHEM 6110. Applications and advanced concepts in physical organic chemistry, including those used in teaching organic chemistry. Topics include classical and modern approaches in physical organic chemistry including MO theory, conformational analysis, stereochemistry, reaction mechanisms, structure and solvent effects, pericyclic reactions, and theories of acidity/basicity. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as

listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7200 - Advanced Chemical Separations and Chemical Equilibrium
3 credit hours
Prerequisite: CHEM 6230/CHEM 6231 or equivalent including a course in quantitative chemical analysis. Advances in theories and applications of analytical chemistry for students familiar with laboratory techniques and chemical instrumentation. Special attention given to chemical equilibrium as it applies to the practice and teaching of chemical separations. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7210 - Problems in Modern Chemical Laboratory Procedures
3 credit hours
Newly developed laboratory techniques and procedures which the student had not previously had the opportunity to learn. Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7220 - Independent Study of Instrumental Analysis
3 credit hours
Developing skill in using selected sophisticated instruments. Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7400 - Computational Chemistry I
4 credit hours
Prerequisite: Foundation courses of the Computational Science Ph.D. program (COMS 6100, COMS 6500, and CSCI 6020) or consent of instructor. Fundamental concepts and practical aspects of various electronic-structure models used in modern computational chemistry. Molecular orbital theory, ab initio and density functional methods, wave-function analyses, and geometry optimization techniques. Offered every fall. Three lectures and one three-hour computer lab.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7410 - Computational Chemistry II
4 credit hours
Prerequisites: CHEM 7400 and consent of instructor. Practical applications of quantum chemistry models. Calculation of molecular properties with high accuracy, computational techniques for large systems, structure prediction and structure-activity relationships. Offered every spring. Three lectures and one three-hour lab.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7420 - Advanced Topics in Inorganic Chemistry
3 credit hours
Prerequisite: CHEM 6400. Applications and advanced concepts of inorganic chemistry; methods of teaching these concepts. Inorganic materials such as metals, superconductors, zeolites, and fullerenes; organometallic compounds, halides, hydrides, and oxides of elements; inorganic reaction mechanisms; bioinorganic chemistry; electronic states and term symbols. Modern methods of teaching inorganic content in general chemistry courses. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7510 - Advanced Biochemistry
3 credit hours
Prerequisite: CHEM 6500 or consent of instructor. Advanced subjects in biochemistry including current techniques in structure/activity relationships of biomolecules, regulation and control of metabolic pathways, bioenergetics, enzymology, control of transcription and translation, regulation of gene expression, and biochemistry of inherited disease. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level

courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7640 - Dissertation Research
1 to 6 credit hours
Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. S/U grading. Offered every term.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7700 - Topics in Theoretical Chemistry
3 to 6 credit hours
Bonding, stereochemistry, empirical and semi-empirical parameters, state functions, spectroscopic interpretation, and reaction mechanisms. Offered on sufficient demand.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7710 - Topics in Applied Chemistry
3 to 6 credit hours
Some important and current practical applications. Offered every other spring.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7720 - Advanced Topics in Physical Chemistry
3 credit hours
Prerequisite: CHEM 6300. Theoretical basis and application of the principal methods used for experimental molecular structure determination. Computational methods of structure prediction and interpretation of data. Searching and retrieving structural information from structural databases. Offered every other fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7800 - Chemistry Internship
3 credit hours
Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7810 - Chemistry Internship
3 credit hours
Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7820 - Seminar in Chemical Education
1 credit hours
Areas and ideas associated with chemical education. Readings from current literature or seminal texts on given topics which may include the role of laboratory in chemical education, current research in science education, trends in chemical education, research techniques in chemical education, and the historical development of chemistry. Offered online. May be taken up to three times for credit. Offered every fall.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7900 - Teaching and Learning in Chemistry
3 credit hours
Areas and ideas associated with chemical education. Readings from the current literature or seminal texts on misconceptions in chemistry, theories of learning, and theories of teaching. Offered summer only.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

CHEM 7910 - Instructional Technology in the Science Classroom
3 credit hours
Explores concepts and applications associated with the use of computer- and other technology-based instructional materials in the science classroom. Readings from current literature or seminal texts on theoretical issues; practical applications associated with the use of technology in teaching scientific concepts. Offered summer only.
NOTE: Graduate standing is the prerequisite for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

Physical Science

PSCI 5030 - Experimental Physical Science
4 credit hours Basic concepts, laws, and principles of astronomy, chemistry, geology, and physics with particular emphasis on the utilization of equipment available or easily improvised in actual school situations to illustrate these concepts, laws, and principles. Offered every term.

PSCI 5080 - Problems in Physical Science
4 credit hours A problem from chemistry, physics, or other physical science appropriate to the student's background and interest. Offered on sufficient demand. May be repeated for a total of eight credits with departmental approval.

PSCI 6020 - Investigations in Physical Science
1 to 3 credit hours Prerequisite: Graduate standing or consent of instructor. Topics from astronomy to chemistry and physics, with special emphasis on the development of hands-on activities, determination of content cognitive demand, development of appropriate assessment instruments/implementation plans, and implementation of these across the pre-college curriculum. For practicing pre-college science teachers and school administrators. Consult the listed instructor for costs and specific credits. Does not apply toward chemistry graduate degrees. Offered on sufficient demand. May be repeated for a total of six credits with departmental approval. Repeatable for up to six credit hours.

PSCI 6800 - Intermediate Physical Science
3 credit hours Selected concepts and theories within the physical sciences of astronomy, chemistry, geology, and physics such as the solar system and the Earth, physical and chemical changes, chemical bonding, acids and bases, rocks and minerals, density, kinematics, electricity, and magnetism. Particular emphasis placed on developing strong content and pedagogical content knowledge in these areas.

PSCI 7800 - Intermediate Physical Science
3 credit hours Selected concepts and theories within the physical sciences of astronomy, chemistry, geology, and physics such as the solar system and the Earth, physical and chemical changes, chemical bonding, acids and bases, rocks and minerals, density, kinematics, electricity, and magnetism. Particular emphasis placed on developing strong content and pedagogical content knowledge in these areas.

Computer Science

Medha Sarkar, Chair
(615) 898-2397
www.mtsu.edu/csc/

The Department of Computer Science offers the Master of Science with a major in Computer Science and a minor at the graduate level. The department also offers courses and participates in the Ph.D. in Computational Science.

Computer Science Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Computer Science, M.S.

Dr. Zhijiang Dong, Program Director
(615) 904-8428
Zhijiang.Dong@mtsu.edu

The Department of Computer Science offers the Master of Science with a major in Computer Science and a minor at the graduate level. The department also offers courses and participates in the Ph.D. in Computational Science. Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Students with or without computer science background are welcomed to apply. Applicant must provide evidence to demonstrate that they have potential to be successful in our graduate program. Applicant must complete the following undergraduate courses before or during the study in our graduate program:

1. CSCI 1170, 2170, 3080, 3110, 3130, and 3240 or equivalent of each course;
2. MATH 1910 and 2050 or equivalent of each course

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts showing an acceptable GPA in previous academic work.

Degree Requirements

The Master of Science in Computer Science requires completion of a minimum of 30-36 semester hours (thesis option) or 36 hours (non-thesis option).

Two options are available: The thesis option and the non-thesis option. Students pursuing either option must meet the following requirements:

1. complete CSCI 5700 if CSCI 4700 or an equivalent course not completed as an undergraduate;
2. complete CSCI 5560 if CSCI 4560 or an equivalent course not completed as an undergraduate;
3. complete CSCI 6620 as part of the required 30-36 hours (thesis option) or 36 hours (non-thesis option).

Curriculum: Computer Science

The following illustrates the coursework requirements. In addition, a maximum of 9 hours of thesis research may be required to fulfill degree requirements.

Candidate must complete 30-36 (thesis option) or 36 (non-thesis option) hours in the following curriculum. Prior approval from the graduate advisor is required if a candidate wants to pursue more than minimum hours.

Thesis Option (30-36 hours)

The Master of Science in Computer Science requires completion of at least 30 hours of graduate coursework in the thesis option. A minimum of 27 hours of coursework (excluding CSCI 6640) is required. A minimum of 1 hour, but not more than 9 hours of CSCI 6640 must be taken for this option. Students must present an oral defense of the thesis. A minimum of 21 hours must be at the 6000 level.

Non-thesis Option (36 hours)

The Master of Science in Computer Science requires completion of 36 hours of graduate coursework in the non-thesis option. Candidates must successfully complete a comprehensive examination. Credit for CSCI 6640 may not be included in the 36 hours. A minimum of 24 hours must be at the 6000 level.

Notes

A student already holding a master's degree from MTSU may complete a second master's degree in Computer Science by satisfying either of the above options with a minimum of 27 semester hours. A minimum of 18 hours must be at the 6000 level.

With the approval of the Computer Science graduate faculty, a maximum of 12 semester hours of residence credit (maximum of 6 in Computer Science) may be transferred from another institution and applied to the master's degree.

Program Notes

Candidate must

1. complete at least 24 semester hours of graduate computer science courses at MTSU;
2. take all courses in the Computer Science Department with the following possible exceptions:
    a. with the prior approval of the Computer Science graduate faculty, a maximum of 6 hours of cognate courses may come from departments other than Computer Science;
    b. with the approval of the candidate's graduate advisor, a single minor up to 12 semester hours may be included. Such a minor must also be approved by the department offering the minor.

Computer Science, M.S., ABM Pathway

Dr. Zhijiang Dong, Program Director
615-904-8428
Zhijiang.Dong@mtsu.edu

The Department of Computer Science offers an Accelerated Bachelors to Masters Pathway in Computer Science corresponding to the Computer Science, B.S.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have completed a minimum of 24 credit hours at MTSU;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

The Department of Computer Science offers two concentrations for Computer Science majors. Students take 6 credit hours from the chart(s) below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

Computer Science Major - Business Applications Concentration				
UG Course Number	**GR Course Number**	**Course Title**	**Hours**	**Major Requirement**
CSCI 4300	CSCI 5300	Data Communication and Networks	3	Upper-division CSCI elective
CSCI 4330	CSCI 6330	Parallel Processing Concepts	3	Upper-division CSCI elective
CSCI 4350	CSCI 5350	Introduction to Artificial Intelligence	3	Upper-division CSCI elective
CSCI 4410	CSCI 5410	Web Technologies	3	Required Major Course
CSCI 4560	CSCI 5560	Database Management Systems	3	Required Major Course
CSCI 4700	CSCI 5700	Software Engineering	3	Required Major Course

Computer Science Major - Professional Computer Science Concentration				
UG Course Number	**GR Course Number**	**Course Title**	**Hours**	**Major Requirement**
CSCI 4300	CSCI 5300	Data Communication and Networks	3	Upper-division CSCI elective
CSCI 4330	CSCI 6330	Parallel Processing Concepts	3	Upper-division CSCI elective
CSCI 4350	CSCI 5350	Introduction to Artificial Intelligence	3	Upper-division CSCI elective
CSCI 4410	CSCI 5410	Web Technologies	3	Required Major Course
CSCI 4560	CSCI 5560	Database Management Systems	3	Required Major Course
CSCI 4700	CSCI 5700	Software Engineering	3	Required Major Course

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Computer Science

CSCI 5160 - Compiler Design and Software Development
3 credit hours Prerequisites: CSCI 3080, CSCI 3110, and CSCI 3160. The various phases of a compiler along with grammars, finite automata, regular expressions, LR parsing, error recovery, backward and forward flow analysis, and code optimization. A term project consisting of the design and construction of a functional compiler required.

CSCI 5250 - Computer Graphics
3 credit hours Prerequisites: CSCI 3110 and CSCI 3080 or consent of instructor. Topics include vector drawing displays, raster scan displays, input devices and techniques, graphics software, transformations, projections, interpolation, and approximation.

CSCI 5300 - Data Communication and Networks
3 credit hours Prerequisite: CSCI 3240 or CSCI 3250. Computer network architectures, protocol hierarchies, and the open systems interconnection model. Modeling, analysis, design, and management of hardware and software on a computer network.

CSCI 5350 - Introduction to Artificial Intelligence
3 credit hours Prerequisites: CSCI 3110 and CSCI 3080 or equivalent. Principles and applications of artificial intelligence. Principles include search strategies, knowledge representation, reasoning, and machine learning. Applications include expert systems and natural language understanding.

CSCI 5360 - Intelligent Robot Systems
3 credit hours Prerequisites: CSCI 3110 and CSCI 3080. Principles and applications of intelligent mobile robotics. Various architectures used in the basic AI robotics development paradigms and basic techniques used for robot navigation. Strong emphasis on hands-on mobile robot design, construction, programming, and experimentation using a variety of robot building platforms.

CSCI 5410 - Web Technologies
3 credit hours Prerequisites: CSCI 3080, CSCI 3110, and CSCI 3240. An intensive introduction into current Web technologies including basic HTML, tools for Web page design, XML, client-side methods, and server-side methods. Students will be required to implement several Web-based projects.

CSCI 5560 - Database Management Systems
3 credit hours Prerequisites: CSCI 3080 and CSCI 3110. The relational and object models of database design along with relational algebras, data independence, functional dependencies, inference rules, normal forms, schema design, modeling languages, query languages, and current literature.

CSCI 5600 - Independent Study in Computer Science
1 to 6 credit hours Prerequisite: Consent of instructor. Students wishing to enroll must submit a written course/topic proposal to the department prior to the semester in which CSCI 5600 is taken. Proposal must be approved prior to taking the course. At the conclusion of the course, each enrollee will submit a written summary of the project.

CSCI 5700 - Software Engineering
3 credit hours Prerequisites: CSCI 3080 and CSCI 3110. Consists of a theoretical component and a practical component. Topics include the history of software engineering, software development paradigms and life cycles, and computer-aided software engineering (CASE). A team project will be developed in parallel with the theory.

CSCI 5800 - Software Testing
3 credit hours Prerequisites: CSCI 2170 and CSCI 3080. Integrates theory and applications of software testing techniques. Provides actual hands-on testing experience. Considers multiple testing paradigms.

CSCI 5850 - Neural Nets
3 credit hours Prerequisite: CSCI 3080. Various neural net architectures, theory, and applications, including models such as Perceptron, back propagation, Kohonen, ART, and associative memory. Learning and conditioning methods also studied.

CSCI 5900 - Selected Topics in Computer Science
3 credit hours Prerequisite: CSCI 2170. Advanced topics in computer science to be selected and announced at time of class scheduling. May be repeated for up to six credits total.

CSCI 6020 - Data Abstraction and Programming Fundamentals
4 credit hours Prerequisites: Previous programming experience in a high-level language and consent of instructor. Advanced introduction to data abstraction, problem solving, and programming. Programming

language concepts, recursion, program development, algorithm design and analysis, data abstraction, objects and fundamental data structures such as stacks, queues, and trees. Three hours lecture and two hours lab. Will not count toward a major or minor.

CSCI 6050 - Computer Systems Fundamentals
4 credit hours Prerequisite: CSCI 6020 or COMS 6100 with minimum grade of B or equivalent. Advanced introduction to computer systems. Data representations, computer arithmetic, machine-level representations of programs, program optimization, memory hierarchy, linking, exceptional control flow, virtual memory and memory management, basic network concepts, and basic concurrent concepts and programming. Three hours lecture and two hours lab. Will not count toward a major or minor unless approved by the department.

CSCI 6100 - Analysis of Algorithms
3 credit hours Prerequisites: CSCI 3080 and CSCI 3110 or consent of instructor. Topics include the analysis and design of algorithms; efficiency of algorithms; design approaches including divide and conquer, dynamic programming, the greedy approach, and backtracking; P and NP; and algorithms in many areas of computing.

CSCI 6180 - Software Design and Development
3 credit hours Prerequisite: CSCI 3110. State-of-the-art techniques in software design and development; provides a means for students to apply the techniques.

CSCI 6250 - Advanced Operating Systems
3 credit hours Prerequisite: CSCI 3240 or CSCI 3250. Topics include concurrent processes, name management, resource allocation, protection, advanced computer architecture, and operating systems implementation.

CSCI 6260 - Advanced Computer Graphics
3 credit hours Prerequisite: CSCI 4250 or CSCI 5250. Topics include three-dimensional curves and surfaces, projections, hidden line and surface elimination, raster graphics systems, and shading techniques.

CSCI 6300 - Networks
3 credit hours Prerequisite: CSCI 4300 or CSCI 5300. Computer communications, network architectures, protocol hierarchies, and the open systems interconnection model. Modeling, analysis, and specification of hardware and software on a computer network. Wide area networks and local area networks including rings, buses, and contention networks.

CSCI 6330 - Parallel Processing Concepts
3 credit hours Prerequisites: [CSCI 3130 and either (CSCI 3240 or CSCI 3250)] or CSCI 6050 and a working knowledge of either C or C++. Parallel processing and programming in a parallel environment. Topics include classification of parallel architectures, actual parallel architectures, design and implementation of parallel programs, and parallel software engineering.

CSCI 6350 - Selected Topics in Artificial Intelligence
3 credit hours Prerequisites: CSCI 3110 and CSCI 4350 or CSCI 5350. In-depth study of the principal areas of the field: artificial intelligence programming, problem-solving methods, knowledge representation methods, deduction and reasoning, and applications such as natural language processing and expert systems. Repeatable up to 6 hours.

CSCI 6430 - Selected Topics in Parallel Processing
3 credit hours Prerequisite: CSCI 4330 or CSCI 6330. An in-depth investigation of one or more topics in parallel processing. Topic(s) to be selected by the professor. Possible topics include parallel algorithms, parallel programming languages, parallel programming tools, parallel software engineering, parallel architectures, parallel applications, and parallel VLSI. Repeatable up to 6 hours.

CSCI 6450 - Operating System Design
3 credit hours Prerequisite: CSCI 6250. Definition, design, and implementation of a significant operating system examining such areas as file systems, process management, memory management, input/output device management, and user interface.

CSCI 6560 - Selected Topics in Database
3 credit hours Prerequisite: CSCI 4560 or CSCI 5560. An in-depth investigation of one or more topics in database. Topic(s) to be selected by the professor. Possible topics include object-oriented database systems, distributed database systems, client-server database systems, deductive databases, multimedia databases, and database theory (concurrency, query optimization, recovery, security). Repeatable up to 6 hours.

CSCI 6600 - Selected Topics in Computer Science
3 credit hours Prerequisites: CSCI 3110; a solid foundation in undergraduate computer science and any other prerequisites determined by the instructor. An in-depth investigation of one or more topics in computer science. Topic(s) to be selected by the professor. Possible topics include search techniques, for example genetic algorithms, soft computing, object-oriented software engineering, expert systems, program verification, software quality, knowledge discovery in databases, and design of embedded software systems. May be repeated for up to six credits total.

CSCI 6620 - Research Methods in Computer Science
3 credit hours Corequisite: Three hours of CSCI 6000-level graduate work (other than CSCI 6640) with minimum grade of B. Emphasizes communication skills, creative thinking, problem solving, and integration of knowledge from prior computer science courses. Includes a study of computer science research tools. Students will select a research problem with approval of the instructor, review pertinent literature, and produce a report using the manual of thesis writing currently approved by the College of Graduate Studies.

CSCI 6640 - Thesis Research
1 to 6 credit hours Prerequisite: CSCI 6620. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

CSCI 6700 - Selected Topics in Software Engineering
3 credit hours Prerequisite: CSCI 4700 or CSCI 5700 or equivalent. In-depth investigation of one or more topics in software engineering selected by the professor. Possible topics include rewriting system, graph grammar, formal method, source transformation, software architecture, and reverse engineering. Repeatable up to 6 hours.

CSCI 7300 - Scientific Visualization and Databases
3 credit hours Prerequisites: CSCI 6020, COMS 6100, and COMS 6500 with minimum grade of B or equivalent or consent of instructor. Introduction to the concepts, theories, and applications of database and visualization methodologies for scientific data. Relational database design along with relational algebras, data independent, functional dependencies, inference rules, normal forms, schema design, modeling language, and query languages discussed. Methods corresponding to the visualization of scalar, vector, and tensor fields as well as multifield problem discussed. Database and visualization discussed in the context of scientific applications.

CSCI 7350 - Data Mining
3 credit hours Prerequisite: Fundamental courses in the Computational Science Ph.D. program and CSCI 6020 or equivalent or consent of instructor. Introduction to concepts, theories, techniques, issues, and applications of data mining. Data preprocessing, association rule analysis, classification analysis, cluster and outlier analysis, deviation detection, statistical modeling, consideration of emergent technologies.

CSCI 7400 - Cloud Computing for Data Analysis
3 credit hours Prerequisite: CSCI 3110 with grade of C or better. Familiarity with Java, Python, C++, Unix, good programming skills, and a solid mathematical background recommended. Introduces the basic principles of cloud computing for massive data applications. Focuses on parallel and/or distributed computing using frameworks like Hadoop and Apache Spark for massive data applications in the areas of web search, information retrieval, and machine learning. Students read and present research papers on these topics, implement programming assignments and projects to get hands-on experience with the cloud computing frameworks for data analysis.

CSCI 7850 - Deep Learning
3 credit hours Prerequisite: CSCI 6020 or equivalent with a grade of C or above or consent of instructor. Various deep learning neural network architectures, theory, and applications including multilayer, convolution, recurrent, transformer, and generative models. Model training, validation, and deployment methodologies also studied.

Concrete and Construction Management

Kelly Strong, Director
(615) 898-2419
www.mtsu.edu/ccm

The School of Concrete and Construction Management offers a Concrete Industry Management concentration in the Business Administration program.

Concrete Industry Management

CIM 5800 - Special Problems in Concrete Industry Management
1 to 3 credit hours Prerequisite: Permission of department. Opportunity to pursue projects of individual interest in concrete industry management. Projects may be technical and/or managerial in nature and may require any combination of literature reviews, lab work, field studies, and other research methods. A faculty member will approve a formally submitted proposal for the study, supervise progress, and grade a report and a presentation which are required upon completion of the project. May be repeated. No more than 6 hours may count toward degree.

CIM 6000 - Concrete Construction Sustainability
3 credit hours Prerequisite: Admittance into the CIM-MBA program: Explores current topics in sustainability specifically as it relates to concrete production and general construction practices in the residential, commercial, and institutional construction segments.

CIM 6010 - Concrete Construction Troubleshooting
3 credit hours Prerequisite: Admittance into the CIM MBA program. Explores current troubleshooting topics in concrete construction as it relates to selection, preconstruction communication, onsite construction activities, and post construction.

CIM 6020 - Project Management in Concrete and Construction
3 credit hours The elements of a project and the role and responsibilities of the construction team studied in depth. Acquaints students with risk management concepts, financial, labor, safety, equipment, and contracting issues facing managers in the engineering and construction environment.

CIM 6030 - Concrete and Construction Costs and Controls
3 credit hours Basic principles and applications of construction finance with an emphasis on the feasibility of a construction project and the acquisition and management of funds needed to profitably build a project. Emphasis also placed on construction competencies necessary for business start-up, operations, and expansion.

Construction Management Technology

CMT 5160 - Construction Safety and Health Management
3 credit hours Prerequisite: Graduate program admission or permission of department. Covers various causes of construction accidents and adopted strategies to prevent worksite injuries and illnesses. Other topics include workers' compensation, economics of construction safety management, and development of a safety program.

Engineering Technology

Kenneth Currie, Chair
(615) 898-2776
www.mtsu.edu/et/

The Department of Engineering Technology offers the Master of Science degree in Engineering Technology with concentrations in Engineering Technology as well as Occupational Health and Safety and thesis and non-thesis options.

The department also offers courses in the Master of Science in Professional Science concentration in Engineering Management. Students interested in the Engineering Management program should refer to the Master of Science in Professional Science.

Engineering Technology, Engineering Technology Concentration, M.S.

Saleh Sbenaty, Program Director
(615) 898-2966
Saleh.Sbenaty@mtsu.edu

The Department of Engineering Technology offers the Master of Science degree in Engineering Technology with concentrations in Engineering Technology as well as Occupational Health and Safety and thesis and non-thesis options. The department also offers courses in the Master of Science in Professional Science concentration in Engineering Management.

Under the Engineering Technology concentration, the degree requires the student to select courses, as approved by the graduate advisor, that provide the student with a technical area of specialty or a minor in another department. Currently, typical technical areas include computer systems and networking, mechatronics, robotics, energy harvesting, instrumentation and control, analog and digital electronics, automation, machine design, manufacturing, quality control, and optimization. Other technical areas or a minor can be designed to meet the student's individual needs if approved by the graduate advisor.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Successful applicants typically have a GRE quantitative score of 148 or higher and a verbal score of 143 or higher.

NOTE: ***The GRE* may *be waived for those students who have a GPA of at last 3.00 from the MTSU Engineering Technology undergraduate program.***

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Science in Engineering Technology with a concentration in Engineering Technology requires completion of a minimum of 30 semester hours (thesis option), with at least 21 hours at the 6000 level. The non-thesis option requires completion of 36 hours, with at least 26 hours at the 6000 level.

Students are expected to have completed 3 semester hours of an approved research tool on the undergraduate or graduate level. Students not meeting this requirement will be expected to complete it as part of their program of study.

Students in the thesis option must complete and successfully defend a thesis (3 hours).

Students following the non-thesis option must successfully complete the research project within the required ET 6190 Six Sigma course, complete a report on the project, and present the results.

Curriculum: Engineering Technology, Engineering Technology

The following illustrates the minimum coursework requirements.

Thesis Option (30 hours)

Core Courses (18 hours)

- ET 6010 - Safety Planning **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**
- ET 6300 - PMI Project Management **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6620 - Methods of Research **3 credit hours**
- ET 6710 - Current and Future Trends in Engineering and Technology **3 credit hours**

Concentration Courses (9 hours)

- ET 6720 - Innovative and Renewable Energy Sources and Technologies **3 credit hours**
- Advisor-approved electives (can include thesis research hours) **6 credit hours**

Thesis Course (3 hours)

- ET 6640 - Thesis Research **1 to 6 credit hours (3 credit hours)**

Non-thesis Option (36 hours)

Core Courses (18 hours)

- ET 6010 - Safety Planning **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**
- ET 6300 - PMI Project Management **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6620 - Methods of Research **3 credit hours**
- ET 6710 - Current and Future Trends in Engineering and Technology **3 credit hours**

Concentration Course (9 hours)

- ET 6720 - Innovative and Renewable Energy Sources and Technologies **3 credit hours**
- Advisor-approved electives (can include thesis research hours) **6 credit hours**

Individualized Study Course (3 hours)

- ET 6510 - Advanced Topics in Technology **3 credit hours** OR
- ET 6910 - Problems in Engineering Technology **3 credit hours**

Advisor-Approved Electives (6 hours)

- Electives-Complete 6 semester hours from approved courses (could include a minor)

NOTE: The program may include a cognate in management and marketing, computer science, economics, computer information systems, or psychology.

Engineering Technology, Occupational Health and Safety Concentration, M.S.

Saleh Sbenaty, Program Director
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The Department of Engineering Technology offers the Master of Science degree in Engineering Technology with concentrations in Engineering Technology as well as Occupational Health and Safety and thesis and non-thesis options. The department also offers courses in the Master of Science in Professional Science concentration in Engineering Management.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Successful applicants typically have a GRE quantitative score of 148 or higher and a verbal score of 143 or higher.

NOTE: ***The GRE*** **may** ***be waived for those students who have a GPA of at last 3.00 from the MTSU Engineering Technology undergraduate program.***

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Science in Engineering Technology with a concentration in Occupational Health and Safety requires completion of 30 semester hours (thesis option), with at least 21 hours at the 6000 level. The non-thesis option requires completion of 36 hours, with at least 26 hours at the 6000 level.

Students are expected to have completed 3 semester hours of an approved research tool on the undergraduate or graduate level. Students not meeting this requirement will be expected to complete it as part of their program of study.

Students in the thesis option must complete and successfully defend a thesis (3 hours).

Students following the non-thesis option must successfully complete the research project within the required ET 6190 Six Sigma course, complete a report on the project, and present the results.

Curriculum: Engineering Technology, Occupational Health and Safety

The following illustrates the minimum coursework requirements.

Thesis Option (30 hours)

Core Courses (18 hours)

- ET 6010 - Safety Planning **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**
- ET 6300 - PMI Project Management **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6620 - Methods of Research **3 credit hours**
- ET 6710 - Current and Future Trends in Engineering and Technology **3 credit hours**

Concentration Courses (9 hours)

- ET 6020 - Safety Technology and Engineering **3 credit hours**
- ET 6040 - Occupational and Environmental Hygiene **3 credit hours**
- ET 6070 - Anthropometric Factors in Accident Prevention **3 credit hours**

Thesis Course (3 hours)

- ET 6640 - Thesis Research **1 to 6 credit hours (3 credit hours)**

Non-thesis Option (36 hours)

Core Courses (18 hours)

- ET 6010 - Safety Planning **3 credit hours**
- ET 6190 - Six Sigma **3 credit hours**
- ET 6300 - PMI Project Management **3 credit hours**
- ET 6390 - Productivity Strategies/Lean Systems **3 credit hours**
- ET 6620 - Methods of Research **3 credit hours**
- ET 6710 - Current and Future Trends in Engineering and Technology **3 credit hours**

Concentration Courses (9 hours)

- ET 6020 - Safety Technology and Engineering **3 credit hours**
- ET 6040 - Occupational and Environmental Hygiene **3 credit hours**
- ET 6070 - Anthropometric Factors in Accident Prevention **3 credit hours**

Individualized Study Course (3 hours)

- ET 6510 - Advanced Topics in Technology **3 credit hours** OR
- ET 6910 - Problems in Engineering Technology **3 credit hours**

Electives (6 hours)*

Complete 6 semester hours from approved courses.

**** The program may include a cognate of 6 hours in management and marketing, computer science, economics, computer information systems, or psychology.***

Engineering Technology

ET 5230 - Advanced Machine Tool Technology
3 credit hours Taper turning, boring and thread chasing, and calculations of screw threads and other operations. Gear terminology and calculations, practice gear cutting on the milling machine, use of index head. Two hours lecture and three hours laboratory.

ET 5330 - Advanced Computer-Aided Drafting
2 credit hours Prerequisite: ET 3360 or permission of instructor. Topics include customizing menus, 3-D concepts and surface modeling, AutoLisp, rendering, and slide shows. Interactive computer drafting and design using advanced AutoCAD software and add-ons. Primarily for students who want to increase their capabilities using CAD. One hour lecture and three hours laboratory.

ET 5360 - Computer-Assisted Drafting and Design II
3 credit hours Prerequisites: ET 2310 or CMT 3320. Utilizes AutoCAD software to develop skills in the creation and analysis of mechanical and architectural solid models for design and production purposes. Includes the use of shading and rendering to enhance three-dimensional model display and the extraction of two-dimensional engineering drawings. Two hours lecture and three hours laboratory.

ET 5440 - Fire Safety
3 credit hours Fundamental methods of fire protection, prevention, and suppression. Includes characteristics and behavior of fire, fire hazards of materials and buildings, codes and standards for fire prevention and protection, fire protection equipment and systems, and fire fighting forces and how they operate.

ET 5590 - Manufacturing Automation Systems
3 credit hours Provides technical, human, and business aspects of modern automation systems. Includes automation controls, levels of control and major components/subsystems, object-based software components, intelligent actuators and sensors, emerging trends, flexible manufacturing systems (FMS), computer integrated manufacturing (CIM), industrial systems and supply chain applications, organizational approaches, and automation justification.

ET 5600 - Programmable Logic Controllers
3 credit hours Prerequisite: ET 3602 or permission of instructor. Introduces programmable logic controllers (PLCs). PLC selection, operation, and troubleshooting. PLC networking. Human machine interface (HMI) and function block diagram. Emphases on PLC ladder diagram and programming. Two hour lecture and three hours laboratory.

ET 5610 - Instrumentation and Controls
3 credit hours Devices and techniques used in the measurement of physical parameters. Consideration of accurates and sources of error, identification of typical measurements, sensors and transducers, control stability, and response. Two hours lecture and three hours laboratory.

ET 5630 - Local Area Networks
3 credit hours Foundation and experience to understand the design, implementation, and management strategies of local area networks (LAN). Data communications standards and protocol fundamentals included. Lecture, laboratory activities, and a LAN design requirement. Two hours lecture and three hours laboratory.

ET 5640 - Industrial Electricity
3 credit hours AC power theory and circuits for industrial applications, polyphase systems, power factor correction, and transformers. Theory, applications, and selection of motors and generators. Control subsystems with emphasis on power electronics. Two hours lecture and three hours laboratory.

ET 5650 - Introduction to Microprocessors
3 credit hours Prerequisite: ET 3620. Introductory course in microprocessor-based systems and their related components. Machine language programming extensively used to solve problems and to demonstrate the relationship of the microprocessor to its supporting peripherals. Basic microcomputer architecture also emphasized. Two hours lecture and three hours laboratory.

ET 5660 - Microprocessor Interfacing
3 credit hours Prerequisites: ET 3640 and ET 3650 or permission of instructor. Emphasis on interfacing various analog and digital devices to a microcontroller/microprocessor-based system: memory expansion, A/D and D/A, display devices, keyboards and keypads, electromechanical devices, and sensors. PLDs (FPGAs/CPLDs) interfaced to

facilitate rapid prototyping of digital system design. Two hours lecture and three hours laboratory.

ET 5670 - Microprocessor Design
3 credit hours Prerequisites: ET 3640 and ET 4660 or permission of instructor. Advanced microprocessor system design. Emphasis on the design of core CPUs and imbedded components using high-density FPGA/CPLD development boards. Industrial applications of microprocessor-based systems. Two hours lecture and three hours laboratory.

ET 5710 - Industrial Seminar
1 credit hours Orientation to industrial job opportunities, placement practices, interview techniques, and preparation of application materials (resume, cover letter). Guest lectures, films, and student and faculty presentations.

ET 5850 - Fluid Power
3 credit hours Prerequisite: ET 3810. Systems and the basic components that make up these systems, including hydraulic, pneumatic, and fluidic. Emphasis on understanding the language and graphic symbols associated with fluid power and the performance characteristics of system components. Two hours lecture and three hours laboratory.

ET 5860 - Robotics
3 credit hours Introduces the fundamentals of robots. Types of robots and controls, the prime movers, and the application of robots in the industrial environment. Two hours lecture and three hours laboratory.

ET 5915 - Technical Project Management and Soft Skills
3 credit hours Prerequisite: Graduate standing. Project management as sanctioned by the International Project Management Institute and how to assess and boost emotional intelligence or soft skills. Student successfully completing course will earn 20 Professional Development Units (PDUs) issued by the International Project Management Institute.

ET 5970 - Engineering Economy
3 credit hours Development of capital budgets; justification of capital projects using time value of money concepts; replacement analysis. Review of justification of actual capital projects and computer applications.

ET 5990 - Industrial Engineering Systems
3 credit hours System design of work tasks including establishing time standards by time and motion study and work sampling; ergonomic design for integration of the human into the work task environment. Scientific methods supplemented by quality considerations with emphasis on statistical quality control (SQC). Computer software used for design and analyses. Graduate students will lead an industry design project team of students.

ET 6010 - Safety Planning
3 credit hours Advanced study of planning in occupational safety and health management, including program planning and development methods and techniques as well as various systems approaches to hazard control.

ET 6020 - Safety Technology and Engineering
3 credit hours Advanced study of the technical components of occupational workplace hazards, hazards analysis, workplace design, current regulatory requirements, engineering techniques for hazard control, personal protective systems, equipment and techniques. Includes a practical application problem of hazard analysis and control.

ET 6040 - Occupational and Environmental Hygiene
3 credit hours An advanced quantitative study of occupational and environmental health principles, practices, and sampling techniques as required by either consensus or regulatory standards and their specific protocols to protect both workers and the public.

ET 6070 - Anthropometric Factors in Accident Prevention
3 credit hours The necessity and desirability of a thorough consideration of anthropometric factors when designing facilities and equipment and recognition of those factors most prevalent in accidents.

ET 6190 - Six Sigma
3 credit hours Prerequisite: MATH 1530 or equivalent or consent of instructor. The Six Sigma methodology is defined as a comprehensive and flexible system for achieving, sustaining, and maximizing business success. Through class instruction, simulations, and hands-on projects, students will be able to identify and focus on customers' critical-to-quality (CTQ) characteristics and

solve problems using the define, measure, analyze, improve, and control (DMAIC) process and its associated tools. A Green Belt certification will be awarded upon successful completion of an industry/business Green Belt project.

ET 6230 - Advanced Technical Drafting
3 credit hours Current trends and techniques such as using computers to solve design problems and the use of group suggestions (brainstorming) in solving design problems.

ET 6260 - Advanced Technical Problems in Electricity and Electronics
3 credit hours In-depth insight into the practical applications of electronic theory. Students required to design and develop electrical/electronic applications of an advanced nature.

ET 6300 - PMI Project Management
3 credit hours Prerequisite: Graduate standing. Project management processes and knowledge areas as sanctioned by the International Project Management Institute (PMI). Successful completion of the course will earn 23 contact hours/professional development units (PDUs) issued by PMI.

ET 6390 - Productivity Strategies/Lean Systems
3 credit hours Prerequisites: Graduate standing and ET 3910 or consent of instructor. Topics include the human element (supervisory and teamwork skills), the theoretical aspect (laws and science covering service and production systems), and the practical aspect (tools for lean operational systems implementation). Theoretical and practical methods needed to complete a required industry/business project and obtain a certification in Lean Manufacturing.

ET 6510 - Advanced Topics in Technology
3 credit hours Independent investigation and report of current problems of particular interest to individual students directed by department faculty members.

ET 6520 - Advanced Topics in Technology
3 credit hours Independent investigation and report of current problems of particular interest to individual students directed by department faculty members.

ET 6620 - Methods of Research
3 credit hours Introduces Master of Science students to scholarly research principles and to thesis formats for research reporting. A problem is researched and written up in thesis proposal format.

ET 6640 - Thesis Research
1 to 6 credit hours Prerequisite: ET 6620. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

ET 6650 - Embedded Microprocessor Design
3 credit hours Prerequisite ET 4660 or consent of instructor. Topics include basics of embedded microprocessor systems, introduction to field programmable gate arrays (FPGA), integrated software environment (ISE), embedded development kit (EDK) CAD software, and the architecture and features of the MicroBlaze soft-core. Two hours lecture and three hours laboratory.

ET 6700 - Analytical Methods in Engineering Technology
3 credit hours Prerequisites: MATH 1530, 1910, and 1920; graduate standing. Survey of essential mathematical skills and their applications in engineering technology. Applications of algebra, calculus, differential equations, linear algebra, numerical analysis, data analysis, statistics, vector analysis, and other topics with specific reference to concepts in an engineering technology curriculum. Symbolic mathematical computer software will be used throughout the course.

ET 6710 - Current and Future Trends in Engineering and Technology
3 credit hours Prerequisite: Graduate standing. The latest advancements and practices in various engineering and technology fields. Selected topics may include computers and electronics, networking and telecommunication, instrumentation, lasers, automation and robotics, manufacturing and rapid prototyping, bioengineering and biotechnology, and renewable energy sources. Takes a student-centered, hands-on learning approach and focuses on understanding new technologies and how technology is used in the industry. Research projects will provide appropriate experience and accommodate individual's interest.

ET 6720 - Innovative and Renewable Energy Sources and Technologies
3 credit hours Prerequisite: Graduate standing. In-depth coverage of current and future renewable energy sources and energy conversion technologies and efficiency and storage technologies.

Environmental, economic, and security impacts are covered.

ET 6730 - Process Control
3 credit hours Prerequisites: MATH 1910 and ET 3602 or equivalent. Basic process control concepts and theory. Analog and digital signal conditioning. Sensors and controllers. Controller principles and control-loop characteristics. Process control applications.

ET 6740 - Engineering Technology Internship
3 credit hours Opportunity for students to gain practical experience in their particular field of interest within the engineering technology or occupational health and safety industries. Student will be evaluated by graduate faculty (with input from his/her supervisor) and a final report will be submitted by the student detailing the internship experience.

ET 6810 - Engineering Management Theory and Application
3 credit hours Prerequisite: Graduate standing. Theories, concepts, and applications from the engineering management body of knowledge (EMBOK) for technical, healthcare, and service industries. EMBOK topics covered defined in the American Society for Engineering Management (ASEM) Guide to the EMBOK and include leadership in technical, healthcare, and service industries; strategic planning in a technical environment; financial resource management in the technical environment; technical project management; operations and supply chain management; technical managers' role in marketing and sales; legal issues in engineering management; professional ethics and responsibilities in a technical environment; product and process development; systems engineering; technical management of research and development; and sustainability engineering.

ET 6870 - Engineering Management Systems
3 credit hours Prerequisite: Graduate standing. Advanced topics related to engineering management systems with a focus on innovation implementation for technical products, technical processes, and for business models in a technical environment. Implementation strategies integrating current and emerging technologies into manufacturing, health care and service industries. Components needed for the construction of new venture business plans to create new technology businesses and jobs.

ET 6910 - Problems in Engineering Technology
3 credit hours Independent investigation and report of a problem in engineering technology. Designed to meet the particular needs of the students; pursued under the direction of a department faculty member.

ET 6920 - Problems in Engineering Technology
3 credit hours Independent investigation and report of a problem in engineering technology. Designed to meet the particular needs of the students; pursued under the direction of a department faculty member.

ET 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. Student must contact graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Environmental Science and Technology

EST 5770 - Pollution Control Technology
3 credit hours Introduces air, noise, solid waste, and water pollution control technology. Legislative regulations and equality standards, pollution types and sources, detection and analysis instruments, and treatment principles and practices.

EST 5780 - Air, Solids, and Noise Pollution Technology
3 credit hours Prerequisites: 8 hours each chemistry, biology, and physics or permission of instructor. Introduces air, noise, solid, and hazardous waste pollution technology, including legislative regulations and quality standards: sources, detection, and analysis instrumentation and practices, and treatment and abatement principles, equipment, and practices.

EST 5810 - Energy and the Environment
3 credit hours Introduces sources and methods of energy production and classifications of energy usages with emphasis on usage trends, energy conservation strategies, and alternate energy utilization.

EST 5820 - Solar Building Design
3 credit hours Introduces environmental and economic impact of solar energy for residential and light industrial construction including topics such as day lighting, passive solar design, and hot water heating.

EST 5840 - Energy Auditing
3 credit hours Introduces types of energy consumption and classifications of energy usages. Emphasis on conservation strategies and total management for residential and industrial plants.

EST 5870 - Passive Solar Design
3 credit hours Introduces passive solar techniques in the construction of residential and light industrial structures. Includes day lighting, passive solar design, methods, and system integration.

EST 5980 - Environmental Public Health
3 credit hours Prerequisites: 8 hours college biology and 8 hours college chemistry. Applying the sciences of biology, chemistry, statistics, and environmental engineering to the field of public health. Public health epidemiology and disease control concepts related to the anticipation, recognition, assessment, and control of common public health disease problems.

Geosciences

Henrique Momm, Chair
(615) 898-2726
www.mtsu.edu/geosciences/

The Department of Geosciences offers a Master of Science in Geosciences with two tracks--professional science and thesis research--and minors in Physical Geography and Earth Science/Geology at the graduate level.

NOTE: Substitutions are made at the discretion of academic advisor.

Earth Science/Geology Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Geosciences, M.S.

Henrique Momm, Program Coordinator
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The Department of Geosciences offers a Master of Science in Geosciences with tracks in professional sciences and thesis research. The professional sciences track is a two-year program that combines business and science with a required professional internship. The thesis research track requires an oral defense of the thesis. Students interested in this program should contact the graduate program director for additional information.

Admission Requirements

Admission to the Master of Science in Geosciences requires

1. an earned bachelor's degree from an accredited university or college with a major in geosciences, anthropology, or related areas;
2. basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must

1. submit application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php.) Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended.
3. submit three letters of reference.
4. submit an official Graduate Record Examination (GRE) report. A composite GRE score of 286 is expected for consideration for unconditional admission.

Degree Requirements

The Master of Science in Geosciences requires completion of 36-39 (thesis option) or 36 (non-thesis option) semester hours.

All students must satisfactorily complete either a pre-professional internship (3 credit hours) or a thesis (6-9 credit hours).

Curriculum, Geosciences

The following illustrates the minimum coursework requirements.

Professional Sciences Track (36 hours)

Business Core (15 hours)

- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- BCED 6910 - Internship Program **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**

Geosciences Courses (21 hours)

Required Courses (5 hours)

- GEOL 6030 - Geosciences Colloquium **2 credit hours**

- PGEO 6070 - Quantitative Methods in Geosciences **3 credit hours**

Electives (16 hours)

A maximum of 8 credit hours of 5000-level courses will count toward the degree. Additional 5000-level credit hours will be considered elective hours. Select 16 hours from the following:

- GEOL 5000 - Petrology and Petrography **4 credit hours**
- GEOL 5020 - Geomorphic Regions of the United States **4 credit hours**
- GEOL 5030 - Invertebrate Micropaleontology **4 credit hours**
- GEOL 5040 - Engineering Geology **3 credit hours**
- GEOL 5050 - Meteorology **3 credit hours**
- GEOL 5060 - Principles of Geoscience **4 credit hours**
- GEOL 5070 - Sedimentation and Stratigraphy **4 credit hours**
- GEOL 5080 - Structural Geology **3 credit hours**
- GEOL 5100 - Geophysical Prospecting **4 credit hours**
- GEOL 5120 - Environmental Geology **4 credit hours**
- GEOL 5130 - Hydrogeology **5 credit hours**
- GEOL 5140 - Inorganic Geochemistry **3 credit hours**
- GEOL 5150 - Environmental Applications of Hydrogeology **3 credit hours**
- GEOL 5401 - Field Course **4 credit hours**
- GEOL 6000 - Environmental Geosystems **3 credit hours**
- GEOL 6010 - Case Studies in Environmental Geosystems **3 credit hours**
- GEOL 6020 - Advanced Hydrogeology **3 credit hours**
- PGEO 5380 - Cartography **3 credit hours**
- PGEO 5401 - Field Studies in Physical Geography **4 credit hours**
- PGEO 5490 - Remote Sensing **4 credit hours**
- PGEO 5510 - Laboratory Problems in Remote Sensing **4 credit hours**
- PGEO 5511 - Advanced Remote Sensing **3 credit hours**
- PGEO 5520 - Image Interpretation **4 credit hours**
- PGEO 5530 - Geographic Information Systems **3 credit hours**
- PGEO 5560 - Intermediate Geographic Information Systems **3 credit hours**
- PGEO 5570 - Advanced Geographic Information Systems **3 credit hours**
- PGEO 6040 - Geospatial Systems and Applications **4 credit hours**
- PGEO 6050 - Programming for Geospatial Database Applications **3 credit hours**
- PGEO 6060 - Advanced Topics in Geosciences **1 to 3 credit hours**
- PGEO 6630 - Graduate Research **1 to 9 credit hours**
- INFS 6520 - IT Project Management Case Studies **3 credit hours**
- COMS 6100 - Fundamentals of Computational Science **3 credit hours**
- PLSO 5340 - Genesis of Soil Landscapes **3 credit hours**
- PLSO 5350 - Soil Survey and Land Use **3 credit hours**

Thesis Research Track (36-39 hours)

Required Geosciences Courses (11-14 hours)

- GEOL 6030 - Geosciences Colloquium **2 credit hours**
- PGEO 6070 - Quantitative Methods in Geosciences **3 credit hours**
- PGEO 6640 - Thesis Research **1 to 9 credit hours (6-9 hours required)**

Electives (25 hours)

A maximum of 11 credit hours of 5000-level courses will count toward the degree. Additional 5000-level credit hours will be considered elective credit hours. Select 25 hours from the following:

- GEOL 5000 - Petrology and Petrography **4 credit hours**
- GEOL 5020 - Geomorphic Regions of the United States **4 credit hours**
- GEOL 5030 - Invertebrate Micropaleontology **4 credit hours**
- GEOL 5040 - Engineering Geology **3 credit hours**
- GEOL 5050 - Meteorology **3 credit hours**
- GEOL 5060 - Principles of Geoscience **4 credit hours**
- GEOL 5070 - Sedimentation and Stratigraphy **4 credit hours**
- GEOL 5080 - Structural Geology **3 credit hours**
- GEOL 5100 - Geophysical Prospecting **4 credit hours**
- GEOL 5120 - Environmental Geology **4 credit hours**
- GEOL 5130 - Hydrogeology **5 credit hours**
- GEOL 5140 - Inorganic Geochemistry **3 credit hours**
- GEOL 5150 - Environmental Applications of Hydrogeology **3 credit hours**
- GEOL 5401 - Field Course **4 credit hours**
- GEOL 6000 - Environmental Geosystems **3 credit hours**
- GEOL 6010 - Case Studies in Environmental Geosystems **3 credit hours**
- GEOL 6020 - Advanced Hydrogeology **3 credit hours**
- PGEO 5380 - Cartography **3 credit hours**
- PGEO 5401 - Field Studies in Physical Geography **4 credit hours**
- PGEO 5490 - Remote Sensing **4 credit hours**
- PGEO 5510 - Laboratory Problems in Remote Sensing **4 credit hours**
- PGEO 5511 - Advanced Remote Sensing **3 credit hours**
- PGEO 5520 - Image Interpretation **4 credit hours**
- PGEO 5530 - Geographic Information Systems **3 credit hours**
- PGEO 5560 - Intermediate Geographic Information Systems **3 credit hours**
- PGEO 5570 - Advanced Geographic Information Systems **3 credit hours**
- PGEO 6040 - Geospatial Systems and Applications **4 credit hours**
- PGEO 6050 - Programming for Geospatial Database Applications **3 credit hours**
- PGEO 6060 - Advanced Topics in Geosciences **1 to 3 credit hours**
- PGEO 6630 - Graduate Research **1 to 9 credit hours**
- INFS 6520 - IT Project Management Case Studies **3 credit hours**
- COMS 6100 - Fundamentals of Computational Science **3 credit hours**
- PLSO 5340 - Genesis of Soil Landscapes **3 credit hours**
- PLSO 5350 - Soil Survey and Land Use **3 credit hours**
- BCED 6820 - Managerial Communication **3 credit hours**
- STAT 5140 - Probabilistic and Statistical Reasoning **3 credit hours**
- ACTG 6100 - Accounting and Legal Issues for Managers **3 credit hours**

- MGMT 6740 - Leadership and Motivation **3 credit hours**

Physical Geography Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Geology

GEOL 5000 - Petrology and Petrography
4 credit hours Prerequisite: GEOL 3000. Igneous, sedimentary, and metamorphic rocks. Theories of formation and evolution based upon mineralogical and geochemical evidence. Examination and classification of rocks in hand sample and thin section. Additional assignments involving data analysis and interpretation and completion of a research paper required for graduate credit. Lecture and laboratory.

GEOL 5020 - Geomorphic Regions of the United States
4 credit hours Prerequisite: GEOL 1030/1031 or 1040/1041. The origin, regional distribution, and geomorphic features and history of the landforms of the United States. Students required to analyze maps, structure sections, and aerial photography to determine geomorphic form and the forces and processes that produced these forms plus research a geomorphic problem resulting in a thesis-type paper. Three hours lecture and two hours laboratory per week.

GEOL 5030 - Invertebrate Micropaleontology
4 credit hours Prerequisite: GEOL 1050. Invertebrate and microscopic animal life of the past including recent preserved representatives and their ancient fossilized ancestors. Numerous field trips to local fossil-collecting sites. Designed to aid in the preparation of earth science teachers, geologists, and biologists. Research paper on a topic approved by instructor. An oral presentation of this material may be required. Lecture and laboratory

GEOL 5040 - Engineering Geology
3 credit hours Prerequisites: GEOL 1030/1031 or GEOL 1040/1041 or equivalent; MATH 1720 and MATH 1710 or MATH 1730. Principles and applications of geology in engineering practice. Engineering geology exploration, behavior of soils and rocks for engineering projects, application of engineering geology to the solution of construction and environmental problems. Three hours lecture per week.

GEOL 5050 - Meteorology
3 credit hours Physical laws as they relate to the atmosphere, atmospheric processes and their effects on air masses, fronts, and atmospheric circulation, the dynamics of the atmosphere and its relationship to the hydrosphere. Special problem to be assigned by the instructor.

GEOL 5060 - Principles of Geoscience
4 credit hours Includes topics from geology, astronomy, meteorology, and oceanography. Specifically designed to aid in the preparation of earth science teachers in the public schools. Term paper on topic approved by the instructor. Three hours lecture and two hours laboratory per week.

GEOL 5070 - Sedimentation and Stratigraphy
4 credit hours Prerequisites: GEOL 1050 and 3000 or consent of instructor. Sedimentary rocks; the processes of sedimentation, the alteration of sediments through time, and an examination of the resulting stratigraphic units. For geoscience majors and those with interests in soil mechanics and civil engineering. Research paper on a topic approved by the instructor. An oral presentation may also be required. Lecture and laboratory.

GEOL 5080 - Structural Geology
3 credit hours Prerequisites: MATH 1720 or MATH 1730; GEOL 1030/1031 or 1040/1041. Orientation and deformation of rock. Geometric, analytical, and statistical solutions to structural problems. Emphasis on three-dimensional visualization, problem solving, geological map interpretation, and the mechanics of deformation. Case analyzing, research, and interpretation required. Lecture and laboratory.

GEOL 5090 - Problems in Geology
1 to 6 credit hours Prerequisite: A minimum of 12 semester hours of geology, at least 6 hours of which must be upper division and excluding GEOL 1030/1031 or by consent of instructor. An independent research-oriented project commensurate with the student's interests and qualifications. In-depth research requiring extensive and intensive search of applicable literature and large study area. An oral examination and discussion required. May be repeated up to a maximum of six hours.

GEOL 5100 - Geophysical Prospecting
4 credit hours Prerequisites: MATH 1910, PHYS 2010/2011 or 2110/2111, or consent of instructor. PHYS 2020/2021 or 2120/2121, GEOL 1030/1031 or 1040/1041, and MATH 1920 also recommended. Survey of seismic, gravimetric, and magnetic/electrical exploration methods. Applied course covering some elementary theory, basic field practice, computation fundamentals, interpretation

techniques. Case analysis, research, and interpretation required. Two-hour lecture and two hours laboratory per week.

GEOL 5120 - Environmental Geology
4 credit hours Prerequisite: GEOL 1030/1031 or 1040/1041 or PGEO 1030 or consent of instructor. Application of geologic information to minimize possible environmental degradation and maximize utilization of resources in the natural and modified environment, local examples and field trips. Topics include engineering properties of earth materials, natural hazard prediction and reduction, water supply, solid and hazardous wastes, mineral resources, global change, land-use planning, environmental impact analysis. Three hours lecture and two hours laboratory per week. An in-depth research project and paper required.

GEOL 5130 - Hydrogeology
5 credit hours Prerequisites: MATH 1720 or MATH 1730; GEOL 1030/1031 or 1040/1041; GEOL 1050; or consent of instructor. Basic processes and measurement of the hydrologic cycle, including precipitation, evaporation, surface runoff, stream flow, soil moisture, and ground water. Emphasis placed on ground water, including geology of occurrence, principles of flow, conceptual models of regional flow, chemistry and quality, well hydraulics, aquifer characteristics, resource development, detection of pollutants, and contaminant transport. Additional individual research project required, including a written and classroom report. Lecture and laboratory.

GEOL 5140 - Inorganic Geochemistry
3 credit hours Prerequisite: GEOL 3000. Principles of inorganic geochemistry. Geochemistry of the earth and solar system, isotope geochronometers, thermodynamics of geochemical processes, mineral stability diagrams, isotope fractionation, rates of geochemical processes, chemical weathering, chemical compositions of surface and groundwater, geochemical exploration, geochemical cycles, environmental geochemistry. Additional assignments involving data analysis and interpretation and completion of a research paper required for graduate credit. Three-hour lecture per week.

GEOL 5150 - Environmental Applications of Hydrogeology
3 credit hours Prerequisite: GEOL 4130 or GEOL 5130. Advanced course that emphasizes applied methods for assessing hazardous and solid waste facilities and contaminated ground water remediation techniques. Included will be site characterization methods, ground water sampling procedures, and monitoring well installation techniques. Additional assignments involving case history analysis with an oral presentation will be required of graduate students. Three hours lecture per week.

GEOL 5401 - Field Course
4 credit hours Supervised study in some geological area preceded by classroom preview and concluded by a time of evaluation. Emphasis on the natural and physical elements of the environment, with special attention directed toward the geomorphology and geology of scientific areas. An intensive period of study and research on a full-time basis. Work required will depend on area researched and time involved. Consult department chair for specific fees.

GEOL 5402 - Field Course
4 credit hours Supervised study in some geological area preceded by classroom preview and concluded by a time of evaluation. Emphasis on the natural and physical elements of the environment, with special attention directed toward the geomorphology and geology of scientific areas. An intensive period of study and research on a full-time basis. Work required will depend on area researched and time involved. Consult department chair for specific fees.

GEOL 6000 - Environmental Geosystems
3 credit hours Corequisite: Graduate standing in Geosciences or permission of department. Principles of environmental geosystems. The role of geologic processes in natural and human-induced distribution of contaminants in minerals, rocks, soils, surface water, and groundwater. Detection, measurement, and remediation of human impacts on geologic environments. Three hours lecture per week.

GEOL 6010 - Case Studies in Environmental Geosystems
3 credit hours Prerequisite: GEOL 6000. Environmental geosystem case studies involving natural and human-induced distribution of contaminants in minerals, rocks, soils, surface water, and groundwater and the detection, measurement, and remediation of contaminants in geologic environments. Three hours lecture per week.

GEOL 6020 - Advanced Hydrogeology
3 credit hours Prerequisite: GEOL 4130 or GEOL 5130. Advanced principles and the applications of

hydrogeologic modeling techniques used to investigate and remediate contaminated groundwater. Three hours lecture per week.

GEOL 6030 - Geosciences Colloquium
2 credit hours Prerequisite: GEOL 1030/1031 or GEOL 1040/1041, or equivalent. A discussion of current issues in geosciences led by guest speakers, MTSU faculty members, and graduate students.

Physical Geography

PGEO 5000 - Climatology and Climate Change
3 credit hours Prerequisite: PGEO 1030 or GEOL 1030/1031 or GEOL 1040/1041. Non-mathematical introduction to the causes and patterns of global climates and in-depth analysis of climate change, including paleoclimatology and recent global cooling and warming trends, their natural and human-induced causes, potential future trends, human and environmental adaptation, and mitigation including geoengineering.

PGEO 5010 - Biogeography
3 credit hours Prerequisite: PGEO 1030 or GEOL 1030/1031 or GEOL 1040/1041. Examines the science of biogeography, geographic principles, and foundations of biogeography. Topics include patterns of biodiversity, ecological biogeography, specialization and extinction forces, and the frontiers of biogeography.

PGEO 5020 - Environmental Issues, Impacts, and Sustainability
3 credit hours Prerequisite: PGEO 1030 or GEOL 1030/GEOL 1031 or GEOL 1040/GEOL 1041. Examines the geographic aspects of how locations affect such modern issues of air and water pollution, hazardous waste, climate change, and food production. Provides an overview of the modern environmental concerns, their causes, consequences, and factors needing to be examined in order to gain an understanding of these problems.

PGEO 5280 - Special Problems and Topics in Physical Geography
1 to 6 credit hours Research participation or guided readings in a particular area or topic appropriate to the student's interests and professional objectives. The type and amount of additional work will be decided upon when student registers for the course.

PGEO 5380 - Cartography
3 credit hours General knowledge of the field including familiarity with the techniques and tools of professional cartography and graphics. Selected lectures and class discussions. A series of map construction assignments; a specialized map assignment supported by written analysis. Three hours lecture per week.

PGEO 5401 - Field Studies in Physical Geography
4 credit hours Supervised study in some geographical area, preceded by classroom preview and concluded by a time of evaluation. Emphasis on the natural and cultural elements of the environment, with special attention directed toward the pattern of human occupancy. An intensive period of study and research on a full-time basis. Work required will depend on area researched and time involved. Consult department chair for specific fees.

PGEO 5490 - Remote Sensing
4 credit hours Various vehicles of remote sensing such as radar, satellite imagery, and infrared data. Use of data in preparation of maps and applications to land use and environmental problems examined. Selection of data from either a numeric or image remote sensing system, interpreting, and developing a report from the interpretations. Three hours lecture and one two-hour laboratory per week.

PGEO 5510 - Laboratory Problems in Remote Sensing
4 credit hours Prerequisite: PGEO 4490 or PGEO 5490. Computer processing of selected satellite imagery. Laboratory will provide practical experience through design, execution, and completion of applied remote sensing projects, one of which will be the effects of an environmental impact.

PGEO 5511 - Advanced Remote Sensing
3 credit hours Prerequisite: PGEO 5490 or PGEO 4490. Lecture and laboratory in the study of advanced topics in remote sensing, including but not limited to, active sensors (LiDAR and RADAR), hyperspectral, and spectroscopy. Three hours lecture/laboratory per week.

PGEO 5520 - Image Interpretation
4 credit hours Principles, methods, and techniques of image interpretation including maps, satellite data, and aerial photos. Environmental impact of a special project. Three hours lecture and one two-hour laboratory per week.

PGEO 5530 - Geographic Information Systems
3 credit hours Lecture and laboratory work relative to computer-manipulated geographic data base. Laboratory work will involve experience in practical application of a geographic information system (GIS) to problem-solving. Student will take appropriate data and compile an environmental impact statement (EIS). Three hours lecture and two hours laboratory per week.

PGEO 5560 - Intermediate Geographic Information Systems
3 credit hours Prerequisite: PGEO 4530 or PGEO 5530. Lecture and laboratory work related to the principles and applications of geographic information systems (GIS). Continued training in GIS analysis including raster analysis, spatial analysis, network analysis, and geocoding. Data management including data editing, geodatabase design, and creation also examined. Other topics include resource management, demographic, and civic application. Three hours lecture per week.

PGEO 5570 - Advanced Geographic Information Systems
3 credit hours Prerequisite: PGEO 4560 or PGEO 5560. Use of geographic information systems, computer programming, and database operations to analyze geodata. Study of geographic areas recently modified by natural or human phenomena to acquire relevant data, use appropriate spatial statistics, and make inferences about the transformative process and/or the future state of the study area. Presentation of findings in both map and report form. Three hours lecture per week.

PGEO 6040 - Geospatial Systems and Applications
4 credit hours Evaluate integrated environmental systems and physical processes in landscapes through application of GIS technology. Make spatial inferences about transformative processes and past/future state of the study area. Describe techniques required to complete environmental studies at multiple scales involving geospatial datasets.

PGEO 6050 - Programming for Geospatial Database Applications
3 credit hours Prerequisite: PGEO 5570. Development of custom/tailored GIS-based computer programming to analyze geospatial datasets for making inferences about the Earth's natural and human systems. Extend commercially available geographic information systems software packages through the development of novel computer programs to perform GIS tasks such as spatial analysis, data transformation, map generation, and geospatial database integration.

PGEO 6060 - Advanced Topics in Geosciences
1 to 3 credit hours Individual-based study/research in particular area or field of Geosciences related to student's interest and professional objectives. May be repeated once, up to a maximum of six credits.

PGEO 6070 - Quantitative Methods in Geosciences
3 credit hours Applies computational technology to solve practical problems in geology and physical geography fields using statistical and data analysis methods to describe, analyze, transform, and utilize geospatial datasets. Processing, summarizing, graphical visualization, and spatial inferences about transformative processes and past/future state of natural environment phenomena.

PGEO 6630 - Graduate Research
1 to 9 credit hours Prerequisite: Department of permission. Selection of a research problem, review of pertinent literature, collection and analysis of data, and documentation of findings.

PGEO 6640 - Thesis Research
1 to 9 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and documentation of results. Students in the Geosciences M.S. thesis track, once enrolled, should register for at least one credit hour of graduate thesis research each semester until completion of the master's thesis.

Mathematical Sciences

D. Christopher Stephens, Chair
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www.mtsu.edu/math/

The Department of Mathematical Sciences offers the Master of Science with a major in Mathematics and a minor in Mathematics at the graduate level.

Five concentrations are offered under the Master of Science: Actuarial and Financial Mathematics (students who need specialized training in actuarial and financial mathematics as well as internship experience should choose this concentration), General Mathematics (students desiring a broad background in mathematics should pursue this concentration); Industrial Mathematics (students interested in positions in industry or further graduate work in applied mathematics should pursue this concentration), Mathematics Education (students desiring to increase their mathematical knowledge for the secondary and early tertiary levels should pursue this concentration), Research Preparation (students wishing to pursue the Ph.D. in Mathematics should choose this concentration).

The department offers courses in the Master of Science in Professional Science degree. Students interested in a concentration in Biostatistics or Actuarial Sciences should refer to the Master's of Science in Professional Science program.

Mathematics Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Mathematics, Actuarial and Financial Mathematics Concentration, M.S.

Don Hong, Program Director
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The Actuarial and Financial Mathematics concentration is for students who need specialized training in actuarial and financial mathematics as well as internship experience.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission normally requires completion of the GRE or MAT with acceptable scores. Successful applicants typically have combined GRE scores of 291 or above or MAT scores of 402 or greater.
Applicant must

1. have earned a bachelor's degree from an accredited university or college;
2. have an acceptable grade point average for all college work taken;
3. have completed 21 semester hours of college-level mathematics (including calculus) with at least 9 hours of mathematics beyond calculus.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE or MAT;
3. submit official transcripts of all previous college work;
4. two letters of recommendation are also recommended, but not required.

Degree Requirements

The Master of Science in Mathematics with a concentration in Actuarial and Financial Mathematics requires completion of a minimum of 36 semester hours.
Candidate must

1. participate in the graduate seminar and give an oral presentation of an approved topic;
2. successfully complete a master's thesis or engage in internship or a written comprehensive examination (may be taken no more than twice).

Curriculum: Mathematics, Actuarial and Financial Mathematics

The following illustrates the minimum coursework requirements.

Required Core Courses (9 hours)

- MATH 6120 - Advanced Linear Algebra **3 credit hours**
- MATH 6170 - Sets and Logic **3 credit hours**
- MATH 6190 - Analysis I **3 credit hours**

Required Concentration Courses (9 hours)

- ACSI 6020 - Construction and Evaluation of Actuarial Models **3 credit hours**
- ACSI 6030 - Actuarial Models for Life Contingencies **3 credit hours**
- ACSI 6040 - Actuarial Models for Financial Economics **3 credit hours**

Thesis/Internship Option

Students may opt in a thesis or internship option. Students who write a master's thesis (MATH 6640) or engage in an internship (ACSI 6910) may substitute one math core course by one of the following data analysis and programming courses in order to prepare them for thesis research or internship working.

- ACSI 6110 Predictive Analysis **3 credit hours**
- STAT 6605 Problems in Statistics-SAS Programming **3 credit**
- STAT 7400 Computational Statistics **3 credit hours**

For the thesis option, students should enroll in MATH 6640 for at least 3 credit hours.
For the internship credits to be awarded, the location must be approved by the faculty advisor and the internship work must be related to actuarial science. Students must keep a portfolio during the internship and do a presentation upon completion of the internship.
Comprehensive exam will be waived if students write a master's thesis or engage in an internship.

Elective Concentration Courses (12-18 hours)

12-18 hours approved by advisor. Courses should be chosen from the following list of courses:

- ACSI 5140 - Mathematical Foundations of Actuarial Science **3 credit hours**
- ACSI 5200 - Introduction to Mathematics of Investment **3 credit hours**
- ACSI 5220 - Mathematics of Corporate Finance **3 credit hours**
- ACSI 5230 - Mathematics of Compound Interest **3 credit hours**
- ACSI 5240 - Mathematics of Interest Theory, Economics, and Finance **3 credit hours**
- ACSI 5330 - Actuarial Mathematics I **3 credit hours**
- ACSI 5340 - Actuarial Mathematics II **3 credit hours**
- ACSI 5530 - Rate Making and Loss Reserving **3 credit hours**
- ACSI 5630 - Mathematics of Risk Management **3 credit hours**
- ACSI 5640 - Mathematics of Options, Futures, and Other Derivatives **3 credit hours**
- ACSI 6010 - Introduction to Loss Models **3 credit hours**
- ACSI 6110 - Predictive Analysis **3 credit hours**
- ACSI 6600 - Problems in Actuarial Science **1 to 6 credit hours**
- ACSI 6910 - Internship in Actuarial Science **3 credit hours**
- MATH 6200 - Analysis II **3 credit hours**
- MATH 6300 - Optimization **3 credit hours**
- MATH 6603 - Problems in Mathematics-Mathematics of Finance **1 to 9 credit hours**
- MATH 6604 - Problems in Mathematics-Mathematics of Life Contingencies **1 to 9 credit hours**
- STAT 5190 - Mathematical Statistics II **3 credit hours**
- STAT 5200 - Statistical Methods for Forecasting **3 credit hours**
- STAT 5320 - Probability and Stochastic Processes **3 credit hours**
- STAT 5360 - Regression Analysis **3 credit hours**
- STAT 5700 - Analysis of Large-Scale Data Sets **3 credit hours**
- STAT 6160 - Advanced Mathematical Statistics I **3 credit hours**
- STAT 6180 - Advanced Mathematical Statistics II **3 credit hours**
- STAT 7400 - Computational Statistics **3 credit hours**

Mathematics, General Mathematics Concentration, M.S.

James Hart, Program Director
(615) 898-2402
James.Hart@mtsu.edu

The General Mathematics concentration is for students desiring a broad background in mathematics.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission normally requires completion of the GRE or MAT with acceptable scores. Successful applicants typically have combined GRE scores of 291 or above or MAT scores of 402 or greater.
Applicant must

1. have earned a bachelor's degree from an accredited university or college;
2. have an acceptable grade point average for all college work taken;
3. have completed 21 semester hours of college-level mathematics (including calculus), with at least 9 hours of mathematics beyond calculus.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE or MAT;
3. submit official transcripts of all previous college work.
4. two letters of recommendation are also recommended, but not required.

Degree Requirements

The Master of Science in Mathematics with a concentration in General Mathematics requires completion of a minimum of 36 semester hours.
Candidate must successfully complete a master's thesis or a written comprehensive examination (may be taken no more than twice).

Curriculum: Mathematics, General Mathematics Concentration

The following illustrates the minimum coursework requirements. In addition, a maximum of 9 hours of thesis research may be required to fulfill degree requirements.

Core Courses (9 hours)

- MATH 6120 - Advanced Linear Algebra **3 credit hours**
- MATH 6170 - Sets and Logic **3 credit hours**
- MATH 6190 - Analysis I **3 credit hours**

Concentration Courses (18 hours)

Eighteen (18) hours from approved courses in mathematical sciences including **at least** one course from three of the following groups:

Actuarial and Financial Mathematics:

- ACSI 5200 - Introduction to Mathematics of Investment **3 credit hours** OR
- MATH 5200 - Introduction to Mathematics of Investment **3 credit hours**

- ACSI 5330 - Actuarial Mathematics I **3 credit hours**
- ACSI 5340 - Actuarial Mathematics II **3 credit hours**
- ACSI 5630 - Mathematics of Risk Management **3 credit hours**
- ACSI 5640 - Mathematics of Options, Futures, and Other Derivatives **3 credit hours**
- ACSI 6010 - Introduction to Loss Models **3 credit hours**
- MATH 6603 - Problems in Mathematics-Mathematics of Finance **1 to 9 credit hours**
- MATH 6604 - Problems in Mathematics-Mathematics of Life Contingencies **1 to 9 credit hours**

Algebra/Number Theory:

- MATH 5420 - Number Theory **3 credit hours**
- MATH 5530 - Abstract Algebra II **3 credit hours**
- MATH 6140 - Selected Topics of Modern Mathematics: Algebra **3 credit hours**
- MATH 6510 - Advanced Algebra **3 credit hours**

Analysis:

- MATH 6141 - Selected Topics of Modern Mathematics: Analysis **3 credit hours**
- MATH 6200 - Analysis II **3 credit hours**
- MATH 6210 - Complex Variables **3 credit hours**
- MATH 6250 - Real Analysis **3 credit hours**

Combinatorics/Graph Theory:

- MATH 5700 - Combinatorics and Graph Theory **3 credit hours**
- MATH 6700 - Advanced Combinatorics and Graph Theory **3 credit hours**

Geometry/Topology:

- MATH 5270 - Introduction to Topology **3 credit hours**
- MATH 6142 - Selected Topics in Modern Mathematics: Topology **3 credit hours**
- MATH 6400 - Advanced Geometry **3 credit hours**

Industrial Mathematics:

- MATH 5310 - Numerical Analysis I **3 credit hours**
- MATH 5320 - Numerical Analysis II **3 credit hours**
- MATH 6260 - Advanced Differential Equations I **3 credit hours**
- MATH 6270 - Advanced Differential Equations II **3 credit hours**
- MATH 6300 - Optimization **3 credit hours**
- MATH 6310 - Control Theory **3 credit hours**

Statistics:

- STAT 5200 - Statistical Methods for Forecasting **3 credit hours**
- STAT 5320 - Probability and Stochastic Processes **3 credit hours**
- STAT 5360 - Regression Analysis **3 credit hours**
- STAT 5370 - Nonparametric Statistics **3 credit hours**
- STAT 5380 - Experimental Design **3 credit hours**
- STAT 6160 - Advanced Mathematical Statistics I **3 credit hours**
- STAT 6180 - Advanced Mathematical Statistics II **3 credit hours**
- STAT 6602 - Problems in Statistics-Regression Analysis **3 credit hours**
- STAT 6603 - Problems in Statistics-Nonparametric Statistics **3 credit hours**
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours**

Cognate (6-9 hours)

- Six to nine additional hours approved by advisor.

Thesis (3-9 hours)

- The master's thesis is an option in this concentration. See MATH 6640 Thesis Research (1 to 6 credits).

Mathematics, Industrial Mathematics Concentration, M.S.

James Hart, Program Director
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The Industrial Mathematics concentration is for students interested in positions in industry or who want to further graduate work in applied mathematics.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission normally requires completion of the GRE or MAT with acceptable scores. Successful applicants typically have combined GRE scores of 291 or above or MAT scores of 402 or greater.
Applicant must

1. have earned a bachelor's degree from an accredited university or college;
2. have an acceptable grade point average for all college work taken;
3. have completed 21 semester hours of college-level mathematics (including calculus), with at least 9 hours of mathematics beyond calculus.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE or MAT;
3. submit official transcripts of all previous college work;
4. two letters of recommendation are recommended, but not required

Degree Requirements

The Master of Science in Mathematics with a concentration in Industrial Mathematics requires completion of a minimum of 36 semester hours.
Candidate must successfully complete a master's thesis or a written comprehensive examination (may be taken no more than twice).

Curriculum: Mathematics, Industrial Mathematics

The following illustrates the minimum coursework requirements. In addition, a maximum of 9 hours of thesis research may be required to fulfill degree requirements.
Students interested in positions in industry or further graduate work in applied mathematics should pursue this concentration. In addition to the core, students must complete the concentration and a cognate as outlined below:

Core (9 hours)

- MATH 6120 - Advanced Linear Algebra **3 credit hours**
- MATH 6170 - Sets and Logic **3 credit hours**
- MATH 6190 - Analysis I **3 credit hours**

Concentration (18 hours)

- MATH 5310 - Numerical Analysis I **3 credit hours**
- MATH 5320 - Numerical Analysis II **3 credit hours**
- MATH 6260 - Advanced Differential Equations I **3 credit hours**
- MATH 6270 - Advanced Differential Equations II **3 credit hours**

plus two courses from

- MATH 6210 - Complex Variables **3 credit hours**
- MATH 6300 - Optimization **3 credit hours**
- MATH 6310 - Control Theory **3 credit hours**
- MATH 6400 - Advanced Geometry **3 credit hours**
- STAT 6180 - Advanced Mathematical Statistics II **3 credit hours**

- MATH 6700 - Advanced Combinatorics and Graph Theory **3 credit hours** OR
- STAT 6160 - Advanced Mathematical Statistics I **3 credit hours**

Cognate (6-9 hours)

- Six to nine additional hours chosen from the list above list

Thesis (3-9 hours)

The master's thesis is an option in this concentration. See MATH 6640, Thesis Research (1 to 6 credits).

Mathematics, Mathematics Education, M.S.

James Hart, Program Director
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The Mathematics Education concentration is for students who desire to increase their mathematical knowledge as applied to the teaching profession at the secondary and early tertiary levels.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission normally requires completion of the GRE or MAT with acceptable scores. Successful applicants typically have combined GRE scores of 291 or above or MAT scores of 402 or greater.
Applicant must

1. have earned a bachelor's degree from an accredited university or college;
2. have an acceptable grade point average for all college work taken;
3. have completed 21 semester hours of college-level mathematics (including calculus), with at least 9 hours of mathematics beyond calculus.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Master of Science in Mathematics applicants must

1. submit application with the appropriate fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE or MAT;
3. submit official transcripts of all previous college work;
4. two letters of recommendation are recommended, but not required.

Degree Requirements

The Master of Science in Mathematics with a concentration in Mathematics Education requires completion of a minimum of 36 semester hours.
Candidate must successfully complete a written comprehensive examination (may be taken no more than twice).

Curriculum: Mathematics, Mathematics Education

The following illustrates the minimum coursework requirements.

Core Courses (9 hours)

- MATH 6120 - Advanced Linear Algebra **3 credit hours**
- MATH 6170 - Sets and Logic **3 credit hours**
- MATH 6190 - Analysis I **3 credit hours**

Students who choose the Thesis Option

Students who choose the Thesis Option may substitute one of the following courses for a core course:

- STAT 6020 - Applied Statistical Methods **3 credit hours**
- STAT 6602 - Problems in Statistics-Regression Analysis **3 credit hours**
- STAT 6603 - Problems in Statistics-Nonparametric Statistics **3 credit hours**
- STAT 6604 - Problems in Statistics-Experimental Design **3 credit hours**

Concentration Courses (15 hours)

15 hours of approved courses in mathematical sciences from the following list:

- MATH 5530 - Abstract Algebra II **3 credit hours**
- MATH 6320 - Mathematical Problem Solving **3 credit hours**
- MATH 6330 - Algebra from an Advanced Perspective **3 credit hours**
- MATH 6340 - Geometry from an Advanced Perspective **3 credit hours**
- MATH 6350 - Probability and Statistics from an Advanced Perspective **3 credit hours**
- MATH 6900 - Research in Mathematics Education **3 credit hours**

Cognate (12 hours)

12 hours of approved courses from the following list: The master's thesis is an option in this concentration (MATH 6640, 1-6 credits)

- MATH 6360 - Technology Tools for School Mathematics **3 credit hours**
- MATH 6380 - Current Trends in Mathematics Education **3 credit hours**
- FOED 6030 - School and Community Relations **3 credit hours**
- FOED 6630 - Educational Tests and Measurements **3 credit hours**
- SPSE 6050 - Instructional Leadership **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**

Mathematics, Research Preparation Concentration, M.S.

James Hart, Program Director
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The Research Preparation concentration is for students wishing to pursue the Ph.D. in Mathematics.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission normally requires completion of the GRE or MAT with acceptable scores. Successful applicants typically have combined GRE scores of 291 or above or MAT scores of 402 or greater.
Applicant must

1. have earned a bachelor's degree from an accredited university or college;
2. have an acceptable grade point average for all college work taken;
3. have completed 21 semester hours of college-level mathematics (including calculus), with at least 9 hours of mathematics beyond calculus.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Master of Science in Mathematics applicants must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE or MAT;
3. submit official transcripts of all previous college work;
4. two letters of recommendation are recommended, but not required.

Degree Requirements

The Master of Science in Mathematics with a concentration in Research Preparation requires completion of a minimum of 36 semester hours.
Candidate must successfully complete a written comprehensive examination (may be taken no more than twice).

Curriculum: Mathematics, Research Preparation

The following illustrates the minimum coursework requirements. In addition, a maximum of 9 hours of thesis research may be required to fulfill degree requirements.

Required Core Courses (9 hours)

- MATH 6120 - Advanced Linear Algebra **3 credit hours**
- MATH 6170 - Sets and Logic **3 credit hours**
- MATH 6190 - Analysis I **3 credit hours**

Concentration (18 hours)

- MATH 5270 - Introduction to Topology **3 credit hours**
- MATH 5530 - Abstract Algebra II **3 credit hours**
- MATH 5700 - Combinatorics and Graph Theory **3 credit hours**
- MATH 6200 - Analysis II **3 credit hours**
- MATH 6140 - Selected Topics of Modern Mathematics: Algebra **3 credit hours**
- MATH 6210 - Complex Variables **3 credit hours**

Cognate (6 hours)

- Six hours approved by advisor

Thesis (3-9 hours)

- MATH 6640 - Thesis Research **1 to 6 credit hours**

Actuarial Sciences

ACSI 5140 - Mathematical Foundations of Actuarial Science
3 credit hours Prerequisite: STAT 3150 or consent of instructor. Integrates probability and risk management topics into fundamental tools for assessing risk in an actuarial environment. Probability topics include random variables, distributions, conditional probability, independence, and central limit theorems. Risk topics include frequency and severity. Insurance concepts such as retention, deductible, coinsurance, and risk premiums.

ACSI 5200 - Introduction to Mathematics of Investment
3 credit hours (Same as MATH 5200.) Prerequisite: MATH 1920 or consent of instructor. Models and methods to analyze investments in bonds, treasury bills, stocks, and other derivatives. Topics include obtaining the price of bonds, stocks, and options; sensitivity analysis; investment performance assessment; portfolio analysis; capital asset pricing model; and mathematical modeling of investor preference and attitude toward risk.

ACSI 5220 - Mathematics of Corporate Finance
3 credit hours Prerequisites: ACSI/MATH 4200/ACSI 5200/MATH 5200 and ECON 2410, 2420, or consent of instructor. Mathematics of capital budgeting and evaluation models in corporate finance. Topics include net present values, internal rate of return, profitability index; evaluation of projects, corporations, and stocks; capital asset pricing model; cost of capital; quantification of risk and uncertainty; capital budgeting; capital structure; income statement and financial planning.

ACSI 5230 - Mathematics of Compound Interest
3 credit hours Prerequisites: ECON 2410, ECON 2420, ACSI/MATH 4200/ACSI 5200/MATH 5200, or consent of instructor. Topics include measurement of interest (including accumulating and present value factors), annuities certain, yield rates, amortization schedules, sinking funds, and bonds and related securities.

ACSI 5240 - Mathematics of Interest Theory, Economics, and Finance
3 credit hours Prerequisites: ACSI 4230/ACSI 5230 or consent of instructor. Applies calculus and theory of interest tools to intermediate topics in microeconomics and macroeconomics and topics in finance. Topics include pricing activities, the simplified Keynesian model, interest and discount rates, valuation of payment streams, yield rates, amortization, cash flows and internal rate of return, stock and bond valuation, portfolio risks, the Capital Asset Pricing Model (CAPM), efficient markets, capital structure, leverage, financial performance measurement, and basic option pricing and the Black-Scholes model.

ACSI 5330 - Actuarial Mathematics I
3 credit hours Prerequisites: ACSI 4230/ACSI 5230 and STAT 4190 or consent of instructor. First of a two-semester sequence. Topics include survival distributions and life tables, life insurance, life annuities, and net premiums.

ACSI 5340 - Actuarial Mathematics II
3 credit hours Prerequisite: ACSI 4230/ACSI 5230 and STAT 4190 or consent of instructor. Concepts and models for long term actuarial mathematics. Topics chosen from net premium reserves, multiple life functions, multiple decrement models, valuation theory and pension plans, and insurance models (including expenses and nonforfeiture benefits and dividends).

ACSI 5530 - Rate Making and Loss Reserving
3 credit hours Prerequisite: ACSI 4200 or consent of the instructor. Introduces the daily work as a P&C actuary in rate making and loss reserving, summarizing loss run data, compiling of loss triangles, computing loss development factors, incurred method, paid method, case method, Bornhuetter-Ferguson method, trend losses, rate making on losses and exposure, IBNR reserving, make loss payments plan, reporting and communication of analysis results.

ACSI 5600 - Problems in Actuarial Science
1 to 6 credit hours Prerequisite: Consent of instructor. Students wishing to enroll must submit a written course/topic proposal to the department prior to the semester in which ACSI 5600 is taken. The proposal must be approved prior to student taking the course. At the conclusion of this course, each enrollee must submit a written report to the department.

ACSI 5630 - Mathematics of Risk Management
3 credit hours Prerequisite: ACSI/MATH 4200/ACSI 5200/MATH 5200. Topics chosen from mathematical modeling of volatility; pricing of bonds and stocks; duration and complexity; asset/liability

management; forward contract, future contract, options; spreads, collars and other hedging strategies; option pricing models, Black-Scholes formula, Greeks, Delta hedge, Delta-Gamma hedge; hedge portfolio and hedge ratio.

ACSI 5640 - Mathematics of Options, Futures, and Other Derivatives
3 credit hours Prerequisites: ACSI/MATH 4630/ACSI 5630/5630 and 4200/ACSI 5200/MATH 5200. Topics chosen from lognormal model; Black-Scholes equation; volatility; risk neutral pricing; simulation; interest rate models; pricing of bonds, option on bonds, interest rate caps, and other interest rate derivatives.

ACSI 6010 - Introduction to Loss Models
3 credit hours Prerequisite: STAT 5190 or consent of instructor. Topics include statistical distributions for modeling insurance claims frequency and severity, aggregate claim distributions, effect of coverage modifications and inflations, and risk measures.

ACSI 6020 - Construction and Evaluation of Actuarial Models
3 credit hours Prerequisite: ACSI 6010 or permission of instructor. Topics include construction of empirical models, construction and selection of parametric models, construction of models in presence of truncation and censoring, interpolation and smoothing, credibility theory, and simulation.

ACSI 6030 - Actuarial Models for Life Contingencies
3 credit hours Prerequisites: STAT 3150 and ACSI 4230 or MATH 6604 or permission of instructor. Topics include survival distributions, life tables, life insurance, life annuities, and pensions, premiums and reserves, multiple lives, multiple decrements, models including expenses.

ACSI 6040 - Actuarial Models for Financial Economics
3 credit hours Prerequisite: ACSI 4200/ACSI 5200 or MATH 6603 or permission of instructor. Topics include applications of stochastic processes to actuarial models, Poisson process, Markov process, interest rate models, arbitrage free models, valuation of derivative securities, financial risk management.

ACSI 6110 - Predictive Analysis
3 credit hours Prerequisite: ACSI 5140 or consent of instructor. Topics include generalized linear models, logistic regression, discriminant analysis, support vector machines, ridge regression, lasso, sparse modeling, variable selection, model selection, and other selected topics from computational statistics, machine learning, and data mining.

ACSI 6600 - Problems in Actuarial Science
1 to 6 credit hours Prerequisites: Mathematical maturity, preparation in actuarial science (normally nine semester hours of graduate study in actuarial science), and consent of instructor. Students wishing to enroll must select a topic in actuarial science prior to the semester in which ACSI 6600 is taken. Topics include, but are not limited to, applications of principles of actuarial mathematics to group and health insurance, retirement benefits, quantitative risk management, rate making, statistical methods in actuarial data analysis, interest rate models and their applications. Students must submit a written report. Course may be taken up to two times provided that the projects are completely different. Credits may total 1-12 hours. Credit will be based on the difficulty and complexity of the project as determined by the instructor. Pass/Fail grading.

ACSI 6910 - Internship in Actuarial Science
3 credit hours Prerequisites: Major in actuarial science; approval of program director; a plan of activities with the associated firm prior to registration. Practical experience in a specific area of actuarial industry for 250 hours. Pass/Fail.

Mathematics

MATH 5010 - Concepts of Mathematics
3 credit hours Recommended for students preparing to become elementary school teachers. Topics include complex numbers, finite mathematical systems, linear equations and inequalities, functions and their graphs, introductory matrix algebra, interest and consumer credit, and microcomputer applications in the mathematics classroom

MATH 5200 - Introduction to Mathematics of Investment
3 credit hours (Same as ACSI 5200.) Prerequisite: MATH 1920 or consent of instructor. Calculus and probability/statistics used to model and analyze investments in bonds, treasury bills, stocks, and other derivatives. Topics include obtaining the price of a bond as a function of interest rate, developing formulas for duration and convexity to study the sensitivity of price to interest rate, and mathematical

modeling of investor preference and attitude toward risk.

MATH 5270 - Introduction to Topology
3 credit hours Prerequisites: MATH 3110 and a previous upper-division course in which the student has been required to write proofs. Fundamental concepts of topology including continuity, compactness, connectedness, separation axioms, and metric spaces.

MATH 5310 - Numerical Analysis I
3 credit hours Prerequisite: CSCI 3180 or equivalent. Application of computer-oriented numerical algorithms to algebraic equations, differential and integral equations, and linear algebra. Rigorous mathematical treatment of error included.

MATH 5320 - Numerical Analysis II
3 credit hours Prerequisite: CSCI 3180 or equivalent. Application of computer-oriented numerical algorithms to algebraic equations, differential and integral equations, and linear algebra. Rigorous mathematical treatment of error included.

MATH 5420 - Number Theory
3 credit hours Divisibility congruences, quadratic residues, Diophantine equations, quadratic forms, and continued fractions.

MATH 5470 - Introduction to Modern Algebra
3 credit hours A treatment of sets, relations, operations, and the construction of number systems in algebra.

MATH 5510 - Abstract Algebra I
3 credit hours Groups with a brief introduction to rings, integral domains, and fields.

MATH 5530 - Abstract Algebra II
3 credit hours Prerequisite: MATH 4510 or MATH 5510. Theory of rings, fields, integral domains, matrices, and vector spaces.

MATH 5600 - Problems in Contemporary Mathematics
1 to 6 credit hours Pass/Fail grading in specified sections.

MATH 5620 - History and Philosophy of Mathematics
3 credit hours Prerequisites: Background in geometry, number theory, and/or symbolic logic helpful. The character of mathematical thought by way of mathematical problems which have occupied successively the outstanding mathematicians of Babylon, Egypt, Greece, China, the Renaissance, and modern times paralleled with a study of three schools of mathematical philosophy: intuitionism, logicism, and formalism. Open only to senior and graduate mathematics majors.

MATH 5700 - Combinatorics and Graph Theory
3 credit hours Prerequisite: MATH 2010 or 3080. Selected topics in combinatorics and graph theory emphasizing combinatorial problem solving and algorithmic proof.

MATH 6100 - Mathematics for Teachers
3 credit hours Mathematics as problem solving, communication, and reasoning. Connecting different fields of mathematics. Topics include number and number relationships, number systems and number theory, computation and estimation, patterns and functions, statistics and probability, algebra, geometry, measurement.

MATH 6120 - Advanced Linear Algebra
3 credit hours Prerequisite: MATH 2010. Continuation of linear algebra topics in MATH 2010 including advanced topics in inner product spaces and structure of linear operators.

MATH 6140 - Selected Topics of Modern Mathematics: Algebra
3 credit hours Prerequisite: MATH 5530 or consent of instructor. Extension of previous work in algebra with emphasis on topics not treated in other courses.

MATH 6141 - Selected Topics of Modern Mathematics: Analysis
3 credit hours Prerequisite: MATH 6200 or consent of instructor. Extension of previous work in analysis with emphasis on topics not treated in other courses.

MATH 6142 - Selected Topics in Modern Mathematics: Topology
3 credit hours Prerequisite: MATH 4270 or MATH 5270 or consent of instructor. Extension of previous work in topology with emphasis on topics not treated in other courses.

MATH 6170 - Sets and Logic
3 credit hours Includes topics in three categories: 1) Propositions, predicates, quantifiers, truth tables, tautologies, and methods of mathematical proof including mathematical induction. 2) Sets, relations, functions, graphs, cardinality, and the Axiom of Choice. 3) Applications of these foundations to selected results in algebra and analysis as time permits. It is recommended that this course be taken early in the graduate program.

MATH 6190 - Analysis I
3 credit hours Prerequisite: MATH 4250 or equivalent. Rigorous treatment of limits, continuity, differentiation, and integration; infinite series; introduction to metric spaces.

MATH 6200 - Analysis II
3 credit hours Prerequisite: MATH 6190 or equivalent. A continuation of MATH 6190. Lebesgue measure, Lebesgue integral, functions of bounded variation.

MATH 6210 - Complex Variables
3 credit hours Prerequisite: MATH 6190. Theory of functions of complex variables and their application in mathematics and physics.

MATH 6230 - Teaching of Introductory College Mathematics
3 credit hours Foundations and pertinent topics in college algebra, trigonometry, analytic geometry, and calculus with emphasis on techniques of presentation.

MATH 6250 - Real Analysis
3 credit hours Prerequisite: MATH 6200. A continuation of MATH 6200. Advanced topics in real analysis. Abstract measure and integration theory. Introduction to functional analysis.

MATH 6260 - Advanced Differential Equations I
3 credit hours Prerequisites: MATH 3120 and 4250. Qualitative and quantitative analysis of systems of differential equations. Gradient systems, Sturm-Liouville problems. Elementary techniques for boundary value problems of partial differential equations.

MATH 6270 - Advanced Differential Equations II
3 credit hours Prerequisite: MATH 6260. Solution techniques for boundary value problems. Problems involve heat, wave, and potential equations. Topics include the method of characteristics, series solutions, integral transforms, and Green's functions.

MATH 6300 - Optimization
3 credit hours Prerequisite: MATH 5320 or consent of instructor. Constrained and unconstrained optimization problems, including the generalized least squares problem and Eigenvalue problems. Methods include orthogonalization, conjugate gradient, and quasi-Newton algorithms.

MATH 6310 - Control Theory
3 credit hours Prerequisite: MATH 6260 or consent of instructor. Vector space applications to system analysis; observability, controllability, and stabilization of systems; feedback systems; Lyapunov methods; optimal control, and the calculus variations.

MATH 6320 - Mathematical Problem Solving
3 credit hours Prerequisite: Permission of instructor. A basis for reflection on teaching and learning mathematics. Problem-solving strategies and heuristics. Focuses on all branches of mathematics, providing an opportunity to synthesize mathematical knowledge.

MATH 6330 - Algebra from an Advanced Perspective
3 credit hours Prerequisite: Permission of instructor. Review and extension of algebraic skills and concepts as they relate to the teaching and learning of algebra. Focus on algebraic thinking and problem solving, algebraic systems, functions, graphing, and linear algebra.

MATH 6340 - Geometry from an Advanced Perspective
3 credit hours Prerequisite: Permission of instructor. Investigations into the foundations of plane, solid, and coordinate geometry, motion geometry, similarities and congruencies, measurement and the application of geometry. Instruction will model the suggested pedagogy appropriate for school mathematics.

MATH 6350 - Probability and Statistics from an Advanced Perspective
3 credit hours Prerequisite: Permission of instructor. Relation to school mathematics. Development of central tendency and variation, concepts of chance including sample space, randomness, conditional probability, and independence.

MATH 6360 - Technology Tools for School Mathematics
3 credit hours Integrates technology into the teaching and learning process for teachers of middle and secondary school mathematics. Investigates a variety of mathematical subject matter appropriate for middle and secondary school students via technology. Lessons designed for use with a variety of technologies, including graphing calculators, dynamic geometry software, spreadsheets, authoring software, presentation software, and the World Wide Web. Highly individualized due to varying backgrounds and interests of students.

MATH 6380 - Current Trends in Mathematics Education
3 credit hours Prerequisite: Permission of instructor. Innovative topics or critical issues related to the teaching and learning of mathematics. Includes history of mathematics education, pedagogical content knowledge, assessment and evaluation, and technologies.

MATH 6400 - Advanced Geometry
3 credit hours Prerequisite: MATH 3070 or consent of instructor. Detailed study of one or more of the various branches of geometry including non-Euclidean geometry, projective geometry, algebraic geometry, and differential geometry.

MATH 6510 - Advanced Algebra
3 credit hours Prerequisite: MATH 5530. Polynomial rings, theory of fields, vector spaces and intermediate group theory necessary for Galois theory, and Galois theory.

MATH 6601 - Problems in Mathematics-Advanced Calculus
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6602 - Problems in Mathematics-Number Theory
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6603 - Problems in Mathematics-Mathematics of Finance
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6604 - Problems in Mathematics-Mathematics of Life Contingencies
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6605 - Problems in Mathematics-Numerical Analysis
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6606 - Problems in Mathematics-Topology
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6607 - Problems in Mathematics-Abstract Algebra
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6608 - Problems in Mathematics-Combinatorics and Graph Theory
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.

MATH 6611 - Problems in Mathematics
1 to 6 credit hours Prerequisite: Consent of instructor. Problem-oriented course providing opportunities for mathematical study in areas of need. Pass/Fail grading.

MATH 6612 - Problems in Mathematics
1 to 6 credit hours Prerequisite: Consent of instructor. Problem-oriented course providing opportunities for mathematical study in areas of need. Standard letter grading.

MATH 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

MATH 6700 - Advanced Combinatorics and Graph Theory
3 credit hours Prerequisite: MATH 4700/MATH 5700. Selected topics in combinatorics and graph theory extending topics studied in MATH 4700/MATH 5700.

MATH 6900 - Research in Mathematics Education
3 credit hours Prerequisite: Permission of instructor. Examines factors influencing research and critical analyses of selected research in mathematics education. Studies representing different methodologies critiqued.

MATH 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

MATH 7060 - Independent Study
1 to 9 credit hours

MATH 7320 - Mathematical Problem Solving
3 credit hours Required of students in Mathematics Education concentration of Mathematics and Science Education Ph.D. program. Examines research on teaching and learning mathematics through problem solving as a process, problem-solving strategies and heuristics, and assessing problem solving. Focuses on all branches of mathematics providing an opportunity to synthesize mathematical knowledge.

MATH 7330 - Ethics in Mathematics Education
3 credit hours Prerequisite: Admission to MSE program and successful completion of either MATH 6900 or MSE 7848. Focuses on the philosophical and theoretical perspectives of ethics and ethical decision making as they relate to the roles and responsibilities of teacher education and researchers in mathematics education. Ethical decision making will be applied through the teaching case method.

MATH 7340 - History, Curriculum, and Policy in Mathematics Education
3 credit hours Prerequisite: Admission to MSE program. Explores the history of mathematics education with particular attention to curriculum development and policy development. Major factors that influence the development of curriculum and policy discussed.

MATH 7450 - Mathematical Modeling I
3 credit hours Prerequisites: COMS 6100 and COMS 6500. Intense lecture and project-oriented course that covers current topics in mathematical modeling in physical and biological sciences.

MATH 7611 - Problems in Mathematics
1 to 6 credit hours Prerequisite: Consent of instructor. Problem-oriented course providing opportunities for mathematical study in areas of need. Pass/Fail grading.

MATH 7612 - Problems in Mathematics
1 to 6 credit hours Prerequisite: Consent of instructor. Problem-oriented course providing opportunities for mathematical study in areas of need. Standard letter grading.

MATH 7640 - Dissertation Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled student should register for at least one credit hour of doctoral research each semester until completion. S/U grading.

MATH 7750 - Mathematical Modeling II
3 credit hours Prerequisite: MATH 7450. Covers mathematical models involving partial differential equations, partial differential integral equations, multiscale modeling, and simulation in physical and biological sciences.

MATH 7800 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

MATH 7810 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

MATH 7900 - Teaching and Learning Mathematics
3 credit hours Focus on theoretical and practical issues regarding how students learn mathematics, best practices for teaching mathematics, and issues from current literature on the teaching and learning of mathematics.

Statistics

STAT 5140 - Probabilistic and Statistical Reasoning
3 credit hours Prerequisite: Must be enrolled in the Master of Science in Professional Sciences program; graduate level. Focuses on probability and statistics concepts. Topics include binomial and normal probabilistic modeling; important statistical concepts such as confounding, randomization, sampling variability and significance; statistical testing of significant differences and associations; and design experiments to test research hypotheses.

STAT 5190 - Mathematical Statistics II
3 credit hours Prerequisite: STAT 3150 or equivalent. Theory of statistical inference. Topics include sampling distributions, decision theory, estimation, test of hypothesis, regression analysis, analysis of variance, and selected applications.

STAT 5200 - Statistical Methods for Forecasting
3 credit hours Prerequisite: STAT 4190. Application of the regression model in forecasting regression and exponential smoothing methods to forecast nonseasonal time-series, seasonal series and globally constant seasonal models, stochastic time series models; and forecast evaluation. (Offers preparation to actuarial science students for the Society of Actuaries Exam #120 and Exam Part 3A administered by the Casualty Actuarial Society.)

STAT 5320 - Probability and Stochastic Processes
3 credit hours Prerequisite: Two semesters of calculus and STAT 3150 (or MATH 2050) or consent of instructor. Theoretical basis for stochastic processes and use as models of real-world phenomena. Topics include Markov chains, Poisson processes, and Brownian motion and stationary processes. Applications include Gambler's Ruin, birth and death models, hitting times, stock option pricing, and the Black-Scholes model.

STAT 5360 - Regression Analysis
3 credit hours Prerequisites: MATH 2050 and STAT 3150 or equivalent. Theory and application of regression models. Approaches to model building and data analysis treated. Computation and interpretation of results facilitated through use of statistical software packages.

STAT 5370 - Nonparametric Statistics
3 credit hours Prerequisite: STAT 3150 or equivalent. Statistical tests that require no assertions about parameters or about the form of the population from which the samples are drawn. A wide range of practical problems.

STAT 5380 - Experimental Design
3 credit hours Prerequisite: STAT 3150 or equivalent. Topics include one-way analysis of variance, multiple comparison, multifactor analysis of variance, and various practical issues in experimental design. Computation and interpretation of results are facilitated through the use of statistical software packages.

STAT 5600 - Problems in Statistics
1 to 6 credit hours Prerequisite: Senior standing and consent of instructor. Students wishing to enroll must submit a written course/topic proposal to the department prior to the semester in which STAT 5600 is taken. Proposal must be approved prior to student taking the course. At the conclusion of the course, each enrollee must submit a written report to the department.

STAT 5700 - Analysis of Large-Scale Data Sets
3 credit hours The analysis and applications of large-scale data sets. Scalable machine learning and data mining applications in a practical clinical environment. Statistical software used in the application of these techniques.

STAT 6020 - Applied Statistical Methods
3 credit hours Prerequisites: MATH 1530, MATH 2050, or STAT 3150 or permission of instructor. Contemporary and medical research methodology for biostatistics. Descriptive and inferential statistics including parametric and nonparametric hypothesis testing methods, sample size, statistical significance and power, survival curve analysis, relative risk, odds

ratios, chi square modeling, and analysis of variance. Data will be analyzed using statistical software.

STAT 6160 - Advanced Mathematical Statistics I
3 credit hours Prerequisite: Two semesters of calculus or permission of instructor. Introduction to theoretical probability used in statistics with an emphasis on the mathematical theory. A rigorous treatment of random variables, their probability distributions, and mathematical exceptions in a univariate and multivariate setting. Includes conditional probabilities, stochastic independence, sampling theory, and limit laws.

STAT 6180 - Advanced Mathematical Statistics II
3 credit hours Prerequisite: STAT 6160 or permission of instructor. Theory of estimation and hypothesis tests. Topics include minimum variance unbiased estimation, methods of estimation, most powerful tests, likelihood ratio tests, decision theory, and sequential test procedures.

STAT 6510 - Biostatistical Methods
3 credit hours Prerequisite: STAT 6020 or permission of instructor. Biostatistical methods focusing on the design and analysis of clinical trials and sample surveys. Topics include clinical trial designs and phases, bias, random error, sample size, power, estimating clinical effects, design-based methods of data analysis from sample surveys, sampling techniques, nonresponse, and sampling frame issues.

STAT 6520 - Advanced Biostatistical Methods
3 credit hours Prerequisites: STAT 6020 and STAT 6160 or permission of instructor. Mathematically rigorous presentation of categorical data analysis methods for univariate and correlated multivariate responses including contingency table analysis, logistic regression, and loglinear models; survival analysis for analyzing time-to-event data including survivor functions, Kaplan-Meier curves, and Cox proportional hazards model; and other health applications of multivariate analysis methods.

STAT 6600 - Problems in Statistics
3 credit hours Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 6601 - Problems in Statistics-Mathematical Statistics
3 credit hours Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 6602 - Problems in Statistics-Regression Analysis
3 credit hours Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 6603 - Problems in Statistics-Nonparametric Statistics
3 credit hours Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 6604 - Problems in Statistics-Experimental Design
3 credit hours Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 6605 - Problems in Statistics-SAS Programming
1 to 9 credit hours Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7020 - Introduction to Biostatistics
3 credit hours Introductory probability/statistics course or permission of instructor. Contemporary and medical research methodology for biostatistics. Descriptive and inferential statistics including parametric and nonparametric hypothesis testing methods, sample size, statistical significance and power, survival curve analysis, relative risk, odds ratios, chi square modeling, and analysis of variance. Data will be analyzed using statistical software. Applied biostatistics research project required (7000) level.

STAT 7400 - Computational Statistics
3 credit hours Prerequisites: COMS 6100 and MATH 2530 or equivalent. Statistical visualization and other computationally intensive methods. The role of computation as a fundamental tool of discovery in

data analysis, statistical inference, and development of statistical theory and methods. Monte Carlo studies in statistics, computational inference, tools for identification of structure in data, numerical methods in statistics, estimation of functions (orthogonal polynomials, splines, etc.), statistical models, graphical methods, data fitting and data mining, and machine learning techniques.

STAT 7600 - Problems in Statistics
1 to 9 credit hours Prerequisite: Permission of instructor, mathematical maturity, preparation in the area, and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7601 - Problems in Statistics-Mathematical Statistics
1 to 9 credit hours Prerequisite: Permission of instructor, mathematical maturity, preparation in the area, and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7602 - Problems in Statistics: Regression Analysis
1 to 9 credit hours Prerequisite: Permission of instructor, mathematical maturity, preparation in the area, and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7603 - Problems in Statistics: Nonparametric Statistics
1 to 9 credit hours Prerequisite: Permission of instructor, mathematical maturity, preparation in the area, and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7604 - Problems in Statistics: Experimental Design
1 to 9 credit hours Prerequisite: Permission of instructor, mathematical maturity, preparation in the area, and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7605 - Problems in Statistics: SAS Programming
1 to 9 credit hours Prerequisite: Permission of instructor, mathematical maturity, preparation in the area, and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.

STAT 7800 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

STAT 7810 - Teaching Internship
3 credit hours Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

Physics and Astronomy

Ron Henderson, Chair
(615) 898-2130
www.mtsu.edu/physics/

The Department of Physics and Astronomy offers a minor at the graduate level. The department also offers courses in the Ph.D. in Molecular Biosciences and the Ph.D. in Computational Science.

Physics Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; a minimum of 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Physics

PHYS 5310 - Electricity and Magnetism
3 credit hours Topics including electric and magnetic fields, electrostatic potential, and potential energy and fields in matter discussed in a mathematically rigorous manner. A variety of good applications of mathematical methods in physics.

PHYS 5380 - Introduction to Quantum Mechanics
3 credit hours Origin of quantum theory; wave packets and deBroglie waves; Heisenberg uncertainty principles. Schroedinger wave equation, operators, eigenfunctions, square well potential, the harmonic oscillator, the hydrogen atom, molecular binding and molecular spectra.

PHYS 6330 - Principles of Modern Physics
3 credit hours Charged particles and their behaviors; electronic structures of the atoms; nuclear structures and processes; and radiation.

PHYS 6340 - Fundamentals of Physics
6 credit hours Basic laws and principles of classical and modern physics. Lecture topics and laboratory experiences designed to advance student's knowledge of physics.

PHYS 7010 - Principles of Molecular Biophysics
3 credit hours Prerequisite: PHYS 2021 or 2120 or permission of department. Reviews the structure of proteins, nucleic acids, carbohydrates, lipids, and the forces and interactions maintaining their structures in solution; thermodynamics and kinetics of protein folding; polymer chain statistics and helix-coil transitions in biopolymers; biopolymer dynamics; structural methods in biology; X-ray crystallography, NMR and fluorescence spectroscopy, electron and probe microscopy, single-molecule methods.

PHYS 7400 - Computational Physics I
3 credit hours Prerequisites: COMS 6500 and COMS 6100 and CSCI 6020 or consent of instructor. Expresses physical phenomena in mathematical form and then adapting these models for analysis using the techniques of computational physics. Covers a number of the computational standards of modern physics such as chaotic dynamics, spectral analysis, Monte Carlo methods, and optimization techniques such as genetic algorithms and simulated annealing.

College of Behavioral and Health Sciences

Physician Assistant Studies, M.S.

Marie Patterson, Program Director
(615) 494-7791
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Offered by the College of Behavioral and Health Sciences, the Master of Science in Physician Assistant Studies (M.S.) degree is designed to provide students with the didactic education, clinical training, and educational credentials necessary to take the Physician Assistant National Certifying Examination (PANCE) and obtain licensure to practice as Physician Assistant (PA).

NOTE: ***Pending ARC-PA approval***

Admission Requirements

The following information applies to the **2021-2022** admissions cycle.

Bachelor's Degree

- The degree must be from a U.S. institution of higher education accredited by a regional accrediting association.
- A bachelor's degree equivalent from another country may also be accepted. Applicants with a bachelor's degree from outside of the U.S. must send their transcripts to one of the member organizations associated with the National Association of Credential Evaluation Services (www.naces.org/members) for translation. Results must be uploaded into the Centralized Application Service for Physician Assistants (CASPA).
- Students may apply while their degree is in progress; however, proof of degree completion will be required before matriculation in the program.

Minimum Grade Point Average (GPA) Requirements (on a 4.0 scale)

- Overall GPA: 3.0
- Prerequisite Course GPA: 3.0
- Science Course GPA: 3.0
- Graduate Course GPA (if applicable): 3.0

Direct Patient Care (DPC) Experience

- No minimum number of hours required for an interview, but the focus will remain on the quality of experience.
- Hours logged to satisfy the direct patient care requirement will only be considered if the experience involves direct responsibility for some aspect of patient care, either by administering, influencing, or providing care in a "hands-on" capacity. It is recommended that students acquire direct patient care hours in various medical settings to obtain strong, diverse direct patient care experiences.

Community Service or Mission Work

- No minimum number of hours required for an interview, but the focus will remain on the quality of experience.

Physician Assistant Shadowing

- A minimum number of 40 hours is recommended so that the applicant will have an adequate understanding of the PA profession.
- Applicants must identify and initiate all PA shadowing experiences. The program cannot suggest nor arrange shadowing opportunities for prospective students.

Letters of Recommendation

- At least three strong letters of recommendation detailing the potential of the applicant to be a PA are required.
- At least one letter of recommendation from a PA is highly recommended.
- Letters from friends or family will not be accepted.

Personal Statement

- A personal statement should be crafted to detail the applicant's desire to become a PA, communicating ideas appropriately and effectively. Well-written personal statements should be free of grammatical and spelling errors.

Graduate Record Examination (GRE)

- The GRE requirement is waived for this cycle due to COVID 19 restrictions.

Other Requirements

- Applicants must not have a history of dismissal from another Physician Assistant program for academic or disciplinary reasons.
- The MTSU Physician Assistant Studies Program does not accept transfers from other programs.
- Applicants must not have a history of current drug abuse or conviction of a felony. All students will be required to submit to criminal background checks and drug screens before matriculation and during enrollment in the program.
- All applicants must be able to meet the program's technical standards. Please refer to the technical standards section found at mtsu.edu/programs/physician-assistant-studies-ms/info.

Prerequisite Courses

Course Work	Semester Credit Hours
Anatomy and Physiology with Lab	8
General Chemistry with Lab	8
General Biology with Lab	8
Microbiology	3
Organic Chemistry or Biochemistry with Lab	4
Developmental Psychology or Human Growth and Development*	3
Medical Terminology*	1

Not subject to the six-year time limit

- All applicants must successfully complete prerequisite requirements with a grade of "C" or higher within the bachelor's degree or through coursework at a regionally accredited U.S. institution of higher education.
- Prerequisite science courses are to be completed within six years prior to the date of admission. Exceeding the six-year time limit for chemistry and general biology coursework, which are completed as prerequisites for other requirements, is acceptable with a waiver. A waiver of either the six-year requirement or grade requirement for a prerequisite course may be requested by the applicant if any of the following conditions occur:
    - There is a continuous employment history that would demonstrate knowledge of the course content, or
    - The applicant has a "B" grade or better within the last six years in a more advanced course in the same subject.
- Waivers and completion instructions are available in the MTSU PA Studies program section of the CASPA portal. The waiver must be approved by the program director and shall not negate or supersede the minimum GPA requirements for prerequisite courses. Knowledge-based testing does not satisfy prerequisites.

Advanced Placement

The MTSU PA Studies program does not award or grant transfer credits or advanced placement to any matriculating student. Prerequisite and graduate coursework from other institutions, which may correspond to courses in the program, will not be considered as substitutions for programmatic curriculum.

International Student Policy
Applicants who are not U.S. citizens are required to submit official test scores for either Test of English as a Foreign Language (TOEFL) or the academic International English Language Testing System (IELTS). The following are the minimum scores for admission consideration:

- TOEFL: iBT score of 80, PBT score of 550, or CBT score of 214
- IELTS: an overall band score of 7.0, with no individual band score below 6.0.

International applicants with degrees from outside the United States must have a degree equivalent of a U.S. bachelor's degree as verified by an **acceptable evaluation service**. Transcripts must be provided in the original language and with an English translation. In addition, all applicants must successfully complete prerequisite courses with a grade of "C" or higher at a regionally accredited U.S. institution of higher education. All required items must be sent to CASPA for verification and official application to the program. No exceptions will be made.
International applicants must also comply with the **International Graduate Admissions** policies within the MTSU College of Graduate Studies.

Admissions Practices

The admissions process is highly selective. Applicants who meet the criteria as outlined above will have their files forwarded to the program for faculty review. The program faculty will conduct a holistic review of the applicant's CASPA application and make recommendations for interviews. It is anticipated that the MTSU Physician Assistant Studies Program will receive a large number of applications for a class of 30 students. Competitive applicants will likely have more than the required minimums; thus, applicants meeting the required minimums are not guaranteed an interview.
The MTSU PA Studies Program endeavors to recruit and retain a diverse community of Physician Assistant students whose qualifications align with programmatic mission and goals. As such, the program has admissions and enrollment practices that advantage specific individuals or groups. Applicants demonstrating any of the following attributes will receive incremental weighting within various sections of the admission's rubric.

Capacity for Academic Success

- GPAs that exceed minimum requirements.

Commitment and Motivation

- Continual medical/science employment (≥ 1 year)
- Extracurricular commitment (≥ 1 year)
- Volunteer commitment (≥ 100 hours)
- Healthcare/science research (until project completion or graduation)
- Achievement of a graduate degree

Mission-Aligned Attributes

- Second-career applicants
- Military Service with honorable discharge
- First generation college student
- Collegiate athlete
- Applicants from a medically underserved area

Application Procedures

Applicants must apply to the program through the Centralized Application Service for Physician Assistants (CASPA) to be considered for admission. Students must submit the appropriate CASPA and MTSU applications fees to be considered. If selected for an interview, students may be asked to complete an additional, abbreviated application form through the College of Graduate Studies.

Degree Requirements

The Master of Science in Physician Assistant Studies requires completion of a minimum of 108 semester hours comprising both didactic and clinical education. Candidates will be required to maintain a minimum 3.0 GPA to complete the program and graduate. The following grading scale is used in the Physician Assistant Studies program:

Grading Scale	
A	90-100%
B	80-89%
C	70-79%
F	69% or below

No D grades will be assigned.

Curriculum: Physician Assistant Studies

Semester One (Summer) - Didactic Phase (20 hours)

- PA 6010 - Regional Anatomy **4 credit hours**
- PA 6110 - Scientific Basis of Medicine I **3 credit hours**
- PA 6210 - Diagnostic Tests I **2 credit hours**
- PA 6310 - Clinical Pharmacology I **3 credit hours**
- PA 6410 - Clinical Medicine I **4 credit hours**
- PA 6510 - History and Physical Exam I **2 credit hours**
- PA 6610 - Clinical Reasoning and Problem-Solving I **2 credit hours**

Semester Two (Fall) - Didactic Phase (18 hours)

- PA 6120 - Scientific Basis of Medicine II **3 credit hours**
- PA 6220 - Diagnostic Tests II **2 credit hours**
- PA 6250 - Introduction to the Medical Profession and Ethical Practice **2 credit hours**
- PA 6320 - Clinical Pharmacology II **3 credit hours**
- PA 6420 - Clinical Medicine II **4 credit hours**
- PA 6520 - History and Physical Exam II **2 credit hours**
- PA 6620 - Clinical Reasoning and Problem-Solving II **2 credit hours**

Semester Three (Spring) - Didactic Phase (19 hours)

- PA 6130 - Scientific Basis of Medicine III **3 credit hours**
- PA 6230 - Diagnostic Tests III **2 credit hours**
- PA 6330 - Clinical Pharmacology III **3 credit hours**
- PA 6430 - Clinical Medicine III **4 credit hours**
- PA 6530 - History and Physical Exam III **2 credit hours**
- PA 6630 - Clinical Reasoning and Problem-Solving III **2 credit hours**
- PA 6740 - Survey of Surgery **3 credit hours**

Semester Four (Summer) - Didactic Phase (20 hours)

- PA 6260 - Population Heatlh **2 credit hours**
- PA 6470 - Clinical Procedures **3 credit hours**
- PA 6670 - Issues in Practice **2 credit hours**
- PA 6680 - Critical Appraisal of Medical Literature and Evidence-Based Medicine **2 credit hours**
- PA 6710 - Survey of Psychiatry **3 credit hours**
- PA 6720 - Survey of Women's Health **3 credit hours**
- PA 6730 - Survey of Pediatrics **3 credit hours**
- PA 6750 - Survey of Emergency Medicine **2 credit hours**

Semester Five (Fall) - Clinical Phase (12 hours)

- PA 6910 - Capstone I **2 credit hours**
- PA 6950 - PANCE Preparation Seminar I **1 credit hours**
- Clinical Rotations I-III (PA 6820-6890) **9 credit hours**

Semester Six (Spring) - Clinical Phase (10 hours)

- PA 6960 - PANCE Preparation Seminar II **1 credit hours**
- Clinical Rotations IV-VI (PA 6820-6890) **9 credit hours**

Semester Seven (Summer) - Clinical Phase (9 hours)

- PA 6920 - Capstone II **2 credit hours**
- PA 6970 - PANCE Preparation Seminar III **1 credit hours**
- Clinical Rotations VII-VIII (PA 6820-6890) **6 credit hours**

Academic Credit

Total academic credit offered by the program is reflected in the chart below:

	Semester Credit Hours
Didactic Courses	77 hours
Clinical Courses	31 hours
Total	108 hours

Physician Assistant

PA 6010 - Regional Anatomy
4 credit hours Prerequisite: Admission to the Physician Assistant Studies program. As the cornerstone of medicine, the study of gross anatomy will provide students with a strong foundation for building a healthcare career. Through a clinically relevant approach, exploring both the structure and function of the human body's major systems will be accomplished primarily through lectures and examination of cadaveric specimens, augmented with virtual learning tools and models. The emphasis will remain on the practical application of anatomical knowledge to the clinical practice of medicine.

PA 6110 - Scientific Basis of Medicine I
3 credit hours Prerequisite: Admission to the Physician Assistant Studies program. A thorough understanding of the scientific basis of medicine is required to diagnose and treat disease. As such, this course will encompass both integrative human physiology and the pathophysiology of disease. The complex interrelationships of function and dysfunction at the molecular, cellular, tissue, organ, and systemic levels will be explored, as well as the genetic basis of disease. As the first in this series of courses, the focus will be on the scientific basis of nutrition, hematology, dermatology, and HEENT, emphasizing homeostatic mechanisms and etiologies of disease.

PA 6120 - Scientific Basis of Medicine II
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; PA 6110. Building upon the foundational knowledge from PA 6110, the student will continue to amass a foundational understanding of physiologic and pathophysiologic principles relating to the cardiovascular, pulmonary, gastrointestinal, and male genitourinary systems. Emphasis is placed upon the relationships of the major systems involving the thorax, abdomen, and pelvis.

PA 6130 - Scientific Basis of Medicine III
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; successful completion of PA 6110 and PA 6120. As the culmination of the Scientific Basis of Medicine series, students will develop a working knowledge of the physiology/pathophysiology of the musculoskeletal, neurological, and endocrine systems. The human immune system will also be highlighted regarding its protagonist function in defense of infectious disease and its antagonistic role in inflammatory and autoimmune disorders.

PA 6210 - Diagnostic Tests I
2 credit hours Prerequisite: Admission to Physician Assistant Studies program. Serves as a comprehensive overview relating to the use of diagnostic modalities, particularly as it relates to concepts in laboratory medicine. Emphasis will remain on a thorough understanding of the laboratory evaluations of various diseases across the spectrum of major body systems. The survey including indications, techniques, and interpretation of results. Furthermore, students will learn how working and differential diagnoses are shaped and refined through the use of diagnostic studies. Through integrated lab, students will also get to apply various classroom principles through active case-based formats.

PA 6220 - Diagnostic Tests II
2 credit hours Prerequisite: Admission to Physician Assistant Studies program; successful completion of PA 6210. Building upon the medical knowledge gained in PA 6210, this course shifts focus toward the study of radiology as a diagnostic and therapeutic modality of modern medicine. Emphasis will be placed on methodology, indications, and interpretation of various types of imaging studies. Case-based integrated learning in lab will continue to help students apply these principles to practice.

PA 6230 - Diagnostic Tests III
2 credit hours
Prerequisites: Admission to Physician Assistant Studies program; successful completion of PA 6210 and PA 6220. In the last of the three-part series on diagnostic testing, the student will learn to perform and interpret a 12-lead EKG to evaluate cardiac symptoms and disease. The course also surveys noncardiac conditions that will produce various EKG changes. Students will gain foundational knowledge that is reinforced through practical application of skill.

PA 6250 - Introduction to the Medical Profession and Ethical Practice
2 credit hours Prerequisite: Admission to the Physician Assistant Studies program. For the future physician assistant, it is critical to understand the historical perspectives of the profession, as well as the legal and ethical implications of practice. After

surveying the history of the profession, students will begin the transition into contemporary medical practice intricacies. Students will study risk management strategies, quality improvement initiatives, patient safety, and prevention of medical errors in addition to a vast array of medico-legal ramifications of contemporary practice. Explores moral concepts related to practical medical decision-making and problem solving to allow students to form a strong foundation for ethical medical practice.

PA 6260 - Population Health
2 credit hours
Prerequisite: Admission to the Physician Assistant Studies program. Aspiring healthcare providers must develop a solid understanding of the principles of disease prevention, surveillance, reporting, and intervention. Thus, students will be introduced to core public health concepts to inform clinical practice and benefit both community and society as a whole. The core focus will be on the frameworks underpinning public health systems, patient advocacy, and population health maintenance. Explores the interrelated facets of social and behavioral sciences to understand the social determinants of health more fully.

PA 6310 - Clinical Pharmacology I
3 credit hours Prerequisite: Admission to the Physician Assistant Studies program. As a clinical science, the study of pharmacology combines the principles of pharmacodynamics, pharmacokinetics, and pharmacotherapeutics to provide students with the knowledge, skills, and abilities required to safely prescribe and monitor medications to treat disease in patients of all ages with varying levels of comorbidities. As the first course in the series, students will be introduced to basic principles of pharmacotherapy, pharmacologic treatment of hematologic and dermatologic disorder, and chemotherapeutic drugs.

PA 6320 - Clinical Pharmacology II
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; successful completion of PA 6310. Building on the principles learned in PA 6310, students will continue to enhance their knowledge regarding the pharmacology of autonomic drugs and various classes of medications used in treating cardiovascular, renal, and gastrointestinal disease. Students will be additionally exposed to other classes of medications affecting smooth muscle. Further emphasis will be placed on additional special topics in pharmacotherapy.

PA 6330 - Clinical Pharmacology III
3 credit hours
Prerequisites: Admission to the Physician Assistant Studies program; successful completion of PA 6310 and PA 6320. Advancing understanding of pharmacotherapeutics, students will move on to become increasingly proficient at the pharmacologic treatment of disease. This installment will focus on pharmacology and pharmacotherapeutics related to orthopaedics, rheumatology, neurology, and endocrinology. Also involves a broad survey of toxicology and a systematic approach to the poisoned patient. Additional emphasis will be on the intricacies of prescribing medication to specialized populations.

PA 6410 - Clinical Medicine I
4 credit hours Prerequisite: Admission to the Physician Assistant Studies program. Introduces the essentials of diagnosis, treatment, and disease prevention. Surveying medicine in the capacity will be pathology-based, arranged by body system and specialty. The fundamental elements of clinical medicine, such as epidemiology, precipitating factors, etiology, risk factors, pathogenesis, pathophysiology, clinical presentation and manifestations, red flags, diagnostics, clinical intervention, management of diseases and disorders, clinical pearls, and differential diagnoses, will be thoroughly explored. Focusing on nutrition, hematology, dermatology, and HEENT, the students will have the opportunity to study acute and chronic care plans. Content will additionally include preventive treatments, patient education, and referrals when necessary.

PA 6420 - Clinical Medicine II
4 credit hours Prerequisites: Admission to the Physician Assistant Studies program; successful completion of PA 6410. Moving into a comprehensive survey of cardiology, pulmonology, gastroenterology, and urology, Clinical Medicine II will continue the exploration of the epidemiology, precipitating factors, etiology, risk factors, pathogenesis, pathophysiology, clinical presentation and manifestations, red flags, diagnostics, clinical intervention, management of diseases and disorders, clinical pearls, and differential diagnoses of the applicable systems. In addition to acute and chronic care plans, the prevention of illness will additionally be highlighted. Discussions regarding patient education and referral will also be considered as parts of the treatment plan.

PA 6430 - Clinical Medicine III
4 credit hours Prerequisites: Admission to the Physician Assistant Studies program; successful completion of PA 6410 and PA 6420. In the last of the Clinical Medicine series, students will continue to expand the breadth of medical knowledge required to practice medicine through a problem-oriented approach. An in-depth examination of orthopaedics, rheumatology, neurology, endocrinology, and infectious disease will promote further understanding of the epidemiology, precipitating factors, etiology, risk factors, pathogenesis, pathophysiology, clinical presentation and manifestations, red flags, diagnostics, clinical intervention, management of diseases and disorders, clinical pearls, and differential diagnoses relevant to these specialties. As with previous courses, acute/chronic care plans, preventive measures, appropriate patient education, and referrals will be seamlessly integrated into the curriculum as an integral part of holistic healthcare.

PA 6470 - Clinical Procedures
3 credit hours Prerequisite: Admission to the Physician Assistant Studies program. Provides students with the fundamental concepts and skills required to perform common clinical procedures based on current practice standards. Students will receive knowledge of key indications, contraindications, risks, and benefits of procedural skills often performed in various practice settings. A basic review of the appropriate anatomy and physiology will be included. The laboratory environment will provide students an opportunity to perform and practice these procedures.

PA 6510 - History and Physical Exam I
2 credit hours Prerequisite: Admission to the Physician Assistant Studies program. Serves as the foundational journey into the medical interview, physical exam, and subsequent patient encounter documentation. With a focus on developing interpersonal communication skills and professionalism, students will learn the art of taking medical history while simultaneously learning to document findings, prepare oral presentations, and effectively exchange information with the patients and other members of the healthcare team. Introduces the student to the physical exam covering vitals, integumentary, and HEENT exams. Content will be reinforced through practical application.

PA 6520 - History and Physical Exam II
2 credit hours Prerequisites: Admission to Physician Assistant Studies program; successful completion of PA 6510. Continues a pragmatic approach to the examination of the thorax, abdomen, and pelvis. The intricacies of cardiovascular, pulmonary, gastrointestinal, and genitourinary portions of the physical exam will thoroughly be discussed, demonstrated, and practiced. The written medical record, oral presentation, and interpersonal/ professionalism skill sets will be continually reinforced.

PA 6530 - History and Physical Exam III
2 credit hours Prerequisites: Admission to Physician Assistant Studies program; successful completion of PA 6510 and PA 6520. Continues to focus on relevant history and physical examination skills needed to assess the musculoskeletal and neurologic systems. Additionally, students will have a comprehensive survey regarding clinical assessment nuances for special patient populations, including pediatric (infants, children, and adolescents) and geriatric age groups. Allows students to coalesce regional and population-specific history and physical exam techniques into a comprehensive history and physical required for preventive, well-person encounters. Underlying emphasis will also be placed on the development of non-cognitive interpersonal and professionalism skills.

PA 6610 - Clinical Reasoning and Problem-Solving I
2 credit hours Prerequisite: Admission to Physician Assistant Studies program. Opportunity to apply the knowledge gained in other classes to the assessment and care of patients across the lifespan. A team-based learning approach will allow the student to organically develop the critical thinking skills necessary to evaluate patients and provide quality patient care effectively. Diagnosis and management decisions related to disorders and diseases of hematologic, dermatologic, and HEENT systems are explored. This course series also offers opportunities to participate and learn collaboratively in interprofessional teams.

PA 6620 - Clinical Reasoning and Problem-Solving II
2 credit hours Prerequisites: Admission to Physician Assistant Studies program; successful completion of PA 6610. Continues to horizontally integrate the materials in other classes into a comprehensive team-based approach to learning. Encompasses the cardiovascular, pulmonary, gastrointestinal, and renal/genitourinary systems. The principles of working collaboratively

in effective healthcare teams will be integrated and practiced in these the learning modules.

PA 6630 - Clinical Reasoning and Problem-Solving III
2 credit hours Prerequisites: Admission to Physician Assistant Studies program; successful completion of PA 6610 and PA 6620. Continues to hone the student's critical thinking skills to support a successful transition to a healthcare provider. Using similar pedagogies and principles as PA 6610 and PA 6620, the course explores clinical manifestations commonly encountered in orthopaedics, rheumatology, neurology, endocrinology, and infectious disease. Additionally, the course supports collaborative interprofessional team-based practice through classroom study and clinical application.

PA 6670 - Issues in Practice
2 credit hours
Prerequisite: Admission to the Physician Assistant Studies program. Leads students to investigate the current trends and issues facing contemporary PA practice. Professional development topics, such as interprofessional team-based approaches to healthcare; palliative and end-of-life care; patient education and counseling; and the business aspects of healthcare are foundational issues in practice and will be considered accordingly. Students will also delve into various elements of personal and professional wellness, including impairment and burnout. Lastly, the knowledge to provide medical care to a diverse patient population will be secondarily underpinned by understanding patient backgrounds, disabilities, and other social determinants of health. Course content will culminate with the retrospective analysis of previous non-cognitive skill development over the didactic year through previous service-based learning opportunities**.**

PA 6680 - Critical Appraisal of Medical Literature and Evidence-Based Medicine
2 credit hours Prerequisite: Admission to Physician Assistant Studies program. Students will learn to seamlessly coalesce the most up-to-date scientific literature with clinician experience and patient values to provide true evidence-based medical care. Emphasis on formulating research questions, interpreting biostatistical methods, and distinguishing types of sampling methods. Uses various medical databases and recognizes medical research limits through critical appraisal. Aids students in preparing to apply evidence-based medicine to their clinical practices.

PA 6710 - Survey of Psychiatry
3 credit hours Prerequisite: Admission to Physician Assistant Students program. Introduces psychiatry and behavioral health as encountered in various medical settings through an integrative approach. Recognition of mental illness will be taught through history and physical exam. In contrast, treatment will be primarily explored through a problem-based approach, emphasizing health promotion and counseling.

PA 6720 - Survey of Women's Health
3 credit hours Prerequisite: Admission to Physician Assistant Studies program. Explores the female patient's reproductive and gynecological health. Gender-specific history and physical exam techniques are presented as foundational principles of women's health. Students will learn the intricacies of prenatal care and the complexities of normal/abnormal obstetrical presentations. Both routine, preventive care, and diagnosis/treatment of common gynecologic conditions will round out the course content to provide a broad spectrum of knowledge and perspective. Encompasses the patient education and counseling unique to women's health.

PA 6730 - Survey of Pediatrics
3 credit hours Prerequisite: Admission to Physician Assistant Studies program. Approaches the care of infants, children, and adolescents through a population-based module focusing on pediatric issues. Addresses the etiology, epidemiology, genetics considerations, clinical signs and symptoms, physical exam findings, diagnosis, treatment, and prognosis for significant pediatric population problems. Emphasis will also be upon the evaluation of human growth and development through the recognition of milestones. Anticipatory guidance, preventive care, and vaccinations will be thoroughly discussed as integral components of pediatric healthcare. Clinical reasoning and problem solving will be reinforced through case-based study.

PA 6740 - Survey of Surgery
3 credit hours
Prerequisite: Admission to the Physician Assistant Studies program. Principles of pre-operative, intra-operative, and post-operative care, providing in-depth instruction across the continuum of surgical care. The core curriculum will survey pre-operative assessment

of surgical risk and planning, surgical techniques for first assistants, operative treatment of disease, and common principles relating to post-operative care.

PA 6750 - Survey of Emergency Medicine
2 credit hours Prerequisite: Admission to the Physician Assistant Studies program. Focuses on shifting the student's attention toward the recognition and treatment of trauma and acute/emergent medical disorders commonly presenting to the emergency department. Emphasis is on the priority of stabilizing patients with life-threatening trauma or illness and selecting appropriate diagnostic and therapeutic measures. Focuses on various clinical and technical skills required to treat patients in the emergency department, including BLS, ACLS, and PALS. Unique challenges in treating patients in this setting will also be discussed.

PA 6820 - Clinical Rotation in Family Medicine
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the PA student with the basics necessary to build a solid foundation for the evaluation, documentation, diagnosis, and treatment of problems common in primary care and family medicine. The student will develop proficiency in office procedures commonly performed in a family medicine office. The student will demonstrate knowledge and core competencies related to comprehensive and continuing health care to a culturally diverse patient population and regardless of the nature or presentation of the problems encountered. The student should be able to recognize the signs and symptoms, diagnosis, and treatment modalities of acute and chronic illnesses encountered in a family practice setting. This rotation will offer clinical experience in an outpatient setting focusing on the knowledge, skills, and abilities related to providing medical care across the life span.

PA 6830 - Clinical Rotation in Internal Medicine
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the PA student with the basics necessary to build a solid foundation for the evaluation, documentation, diagnosis, and treatment of problems commonly encountered in internal medicine. The student will demonstrate knowledge and core competencies related to internal medicine pertaining to the diagnoses, pathophysiology, risk factors, laboratory interpretation, procedures, and therapeutic strategies used in patient evaluation and treatment. During this rotation, the student is expected to recognize the signs and symptoms of a variety of medical illnesses and become familiar with treatment plans appropriate to internal medicine. This rotation will offer clinical experience providing medical care for mainly the adult and elderly population. Testing and evaluation for this rotation will be based on the knowledge, skills, and abilities related to internal medicine.

PA 6840 - Clinical Rotation in Behavioral Health
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the PA student the ability to develop the skills necessary to evaluate and manage patients with a variety of emotional and psychiatric problems. The rotation will provide students the opportunity to develop an understanding of the role of psychiatrists, psychologists, social workers, and nurses in the care of the psychiatric patient. Students will learn the appropriate use of selected psychoactive pharmaceuticals. The student will learn and strengthen their deductive reasoning and clinical decision-making skills by developing a systematic, evidence-based approach to common behavioral medicine problems. There will be ample opportunity for the student to practice the skills necessary to perform psychiatric interviews, mental status examinations, and make referrals for specialized psychiatric treatment. Emphasis will be placed on developing clinical and communication skills, further strengthening students' ability to gain insight into the psychosocial aspects of comprehensive patient care.

PA 6850 - Clinical Rotation in Women's Health
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the student with an experience in the care of the female patient, and the impact of disease processes on the reproductive system. Develops the skills and knowledge necessary to evaluate, manage, and educate the patient in areas such as annual examinations, birth control, infertility, menstruation, sexuality, pregnancy, prenatal care, and menopause. During this rotation, the student is expected to recognize the signs and symptoms of a variety of medical conditions and become familiar with treatment plans appropriate to women's health, including gynecology and reproductive care. This rotation will offer clinical experience in outpatient facilities with possible inpatient care for female patients.

PA 6860 - Clinical Rotation in Emergency Medicine
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the PA student with exposure to the diagnosis and treatment of patients of all ages presenting to the emergency care center with a wide variety of acute and emergent health care problems. Emphasis is placed on developing skills in recognizing signs and symptoms of common emergencies, taking appropriate action to sustain life, collecting relevant data, and providing accurate assessment and management of a variety of acute and life-threatening medical, surgical, and psychiatric illnesses and injuries. The PA student will learn the indications, limitations, and the evidence-based methodology of emergency medicine procedures and therapeutic strategies. Students will demonstrate knowledge and competencies appropriate to clinical problems encountered and procedures common to the emergency room setting. The student will also learn strategies for interacting with patients and/or families in various levels of stress.

PA 6870 - Clinical Rotation in Pediatrics
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the student with experience in pediatric medicine to include care of the neonate through the teenage years. The student will learn to perform an evaluation of the healthy pediatric patient; recognize, evaluate, and treat the common illnesses and problems experienced by the neonate, infant, small child, pre-adolescent, and adolescent to the age 18. The student is expected to recognize signs and symptoms of a variety of pediatric disorders. In addition, the student will demonstrate the appropriate evaluation of normal child development, well-child care, current immunization updates, and ongoing patient education and health promotion. Additionally, the student will learn to identify and manage pediatric emergencies.

PA 6880 - Clinical Rotation in Surgery
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the PA student with the opportunity to learn surgical principles, surgical pathology, and relevant laboratory studies as seen in surgical settings, as well as indications, limitations, and methodology of surgical procedures, and therapeutic strategies used in surgery today. Students will develop the skills necessary to evaluate and manage patients with a variety of surgical conditions. This rotation will encourage the student to respect and appreciate the contributions of other health care professionals in the overall delivery of health care and the importance of a team approach. The surgery rotation will provide the student with access to patients in the inpatient setting, the operating room, and may also include evaluating patients in the outpatient setting. Testing and evaluation for this rotation will be based on the knowledge, skills, and abilities related to surgery.

PA 6890 - Elective Clinical Rotation
3 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program. Provides the PA student with the basics necessary to build a solid foundation for the evaluation, documentation, diagnosis, and treatment of medical problems commonly observed in practice.

PA 6910 - Capstone I
2 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program and admission to the clinical phase. Capstone I project will be based on a developed research proposal that is selected from a menu of potential approaches, such as a traditional quasi-experimental study, an evidence-based medicine question, a case report, and a comprehensive literature review. The student will formally present the findings to the University community during the Capstone II course. This course takes place during the clinical phase and involves students meeting with the course coordinator and advisor periodically throughout the phase.

PA 6920 - Capstone II
2 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program and admission to the clinical phase; PA 6910. Each student will present the results of individual projects submitted in Capstone I to demonstrate an understanding of the program and profession's principles in mastering evidence-based medicine and medical research abilities. This capstone project will need to be clearly presented, organized, and succinctly defended.

PA 6950 - PANCE Preparation Seminar I
1 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program and admission

to the clinical phase. This is the first in a series in which preparation occurs for successful completion of the Physician Assistant National Certifying Examination (PANCE), necessary for entering medical practice. Strategies for successful study and successful completion of board-style examinations, as well as an intense overview of medical knowledge to help prepare for the PANCE. Covers the cardiovascular system; dermatologic system; endocrine system; eyes; ears, nose, and throat systems. A review of history taking and physical examination while incorporating diagnostic and laboratory studies to formulate the most likely diagnosis will also occur. Pass/Fail.

PA 6960 - PANCE Preparation Seminar II
1 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program and admission to the clinical phase; passing mark in PA 6950. This is the second in the series in which preparation occurs for successful completion of the Physician Assistant National Certifying Examination (PANCE), necessary for entering medical practice. Strategies for successful study and successful completion of board-style examinations, as well as an intense overview of medical knowledge to help prepare for the PANCE. Covers gastrointestinal system/nutrition, genitourinary system (both male and female), renal system, hematologic system, and infectious diseases. It will also further review the management of patients, health maintenance, patient education, and preventative measures. Pass/Fail.

PA 6970 - PANCE Preparation Seminar III
1 credit hours Prerequisites: Admission to the Physician Assistant Studies program; completion of the didactic phase of the PA program and admission to the clinical phase; passing mark in PA 6960. This is the conclusion of the series in which preparation occurs for successful completion of the Physician Assistant National Certifying Examination (PANCE), necessary for entering medical practice. Strategies for successful study and successful completion of board-style examinations, as well as an intense overview of medical knowledge to help prepare for the PANCE. Covers musculoskeletal system, neurologic system, psychiatric/behavioral science, pulmonary system, and reproductive system. It will further review clinical intervention, pharmaceutical therapies, and the application of basic scientific concepts while in clinical practice. Pass/Fail.

Criminal Justice Administration

Lee Wade, Chair
(615) 898-2630
www.mtsu.edu/criminaljustice/

The Department of Criminal Justice Administration offers a Master of Criminal Justice (M.C.J.) degree. A minor in Criminal Justice at the graduate level is also offered at MTSU.

The M.C.J. degree can be obtained entirely online, in class, or as a combination of the two.

Criminal Justice Administration Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Criminal Justice Administration, M.C.J.

Carter Smith, Program Director
(615) 898-2261
Carter.Smith@mtsu.edu

The Department of Criminal Justice Administration offers a Master of Criminal Justice (M.C.J.) degree. A minor in Criminal Justice Administration at the graduate level is also offered at MTSU.
The M.C.J. degree can be obtained entirely online, in class, or as a combination of the two.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants are expected to have an undergraduate degree in criminal justice or to have completed a minimum of 18 credits at the undergraduate level in criminal justice or an approved equivalent and an undergraduate grade point average of 3.0 or above.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applications for admission will be considered on a rolling basis.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of previous college work.

Degree Requirements

The Master of Criminal Justice degree requires completion of a minimum of 33 semester hours (thesis) or 36 hours (non-thesis) with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours.
NOTE: ***Thesis-track students will be required to complete and successfully defend a research-based thesis. Non-thesis track students will be required to complete and successfully pass a written comprehensive exam in the same semester as the capstone is taken.***

Curriculum: Criminal Justice

The following illustrates the minimum coursework requirements.

Thesis Option (33 hours)

Core Courses (18 hours)

- CJA 6000 - Criminal Justice Administration **3 credit hours**
- CJA 6010 - Seminar in Law Enforcement **3 credit hours**
- CJA 6020 - Judicial Seminar **3 credit hours**
- CJA 6030 - Contemporary Corrections **3 credit hours**
- CJA 6640 - Thesis Research **1 to 6 credit hours (3 credit hours)**

- CJA 6900 - Research in the Criminal Justice Process **3 credit hours** OR
- CJA 6910 - Qualitative Research **3 credit hours**

Electives (15 hours)

- Selected in consultation with advisor **15 credit hours**

Non-thesis Option (36 hours)

Core Courses (18 hours)

- CJA 6000 - Criminal Justice Administration **3 credit hours**
- CJA 6010 - Seminar in Law Enforcement **3 credit hours**
- CJA 6020 - Judicial Seminar **3 credit hours**
- CJA 6030 - Contemporary Corrections **3 credit hours**
- CJA 6990 - Graduate Capstone Course **3 credit hours**

- CJA 6900 - Research in the Criminal Justice Process **3 credit hours** OR
- CJA 6910 - Qualitative Research **3 credit hours**

Electives (18 hours)

- Selected in consultation with advisor **18 credit hours**

Criminal Justice Administration

CJA 5220 - Community Relations and Minority Problems
3 credit hours Analysis of public hostility toward police and current community relations projects; training and education of law enforcement officers; responsibilities of police administrators; causes of tension and conflict, positive and negative factors in the control of minority group hostilities; minority recruitment in law enforcement.

CJA 5260 - Special Issues in Criminal Justice
3 credit hours Variety of subtopics related to the criminal justice system such as problems in private security and public morality with regard to criminal justice theory, victimology, drug use, alcoholism, and sex offenses; analysis of current police training programs; relationships between legislation and political processes which affect the criminal justice system.

CJA 5330 - Criminal Investigation
3 credit hours General investigative responsibilities and techniques, including administration preparation, investigative jurisdiction and responsibility, and the importance of substantive report writing. Includes special techniques required for specific investigative categories.

CJA 5500 - The Juvenile Justice System
3 credit hours Juvenile delinquency and youth crime with emphasis on the history of the juvenile justice system, the court and police role within the system, rehabilitation and correction of the delinquent, and juvenile probation services. Alternatives to traditional procedures: community-based programs versus correctional institutions, nonjudicial adjustment, etc., examined.

CJA 5530 - Criminal Evidence and Procedures
3 credit hours Types of individuals and problems of admissibility in court proceedings, proper treatment and disposition of evidence, legal procedure to be followed, and actual trial procedure.

CJA 5750 - Seminar in Corrections
3 credit hours Each student selects a problem area of interest for an intensive research effort. The group will be presented with a contemporary corrections issue or problem and will be required to create practical and workable strategies for coping with the issue. Where feasible, arrangements will be made to implement the program in an actual correctional setting.

CJA 5800 - Crime in America: An Assessment
3 credit hours An in-depth survey of the impact of crime on American society: amount and trends of crime, economic impact of crime, professional and white collar crime, characteristics of offenders and victims of crime.

CJA 5900 - Readings in Criminal Justice
3 credit hours Advanced students capable of independent study will be allowed to do in-depth readings in a particular area of criminal justice relevant to individual interests. Annotated bibliography and report required. Arrangements should be made with the instructor prior to registration.

CJA 5930 - International Criminal Justice
3 credit hours Prerequisite: CJA 1100 or permission of instructor. Compares the American criminal justice system with those in other countries, and examines historical origins, structural differences, and varying degrees of effectiveness and efficiency in law enforcement, courts, and corrections in selected nations. Explores challenges posed by the globalization of crime and terrorism.

CJA 6000 - Criminal Justice Administration
3 credit hours Criminal justice, juvenile justice, correctional and mental health processes, and other issues including those arising out of other processes of social control and community-based treatment of offenders. Development of a critical analysis of current literature, compilation of a bibliography, and completion of an intensive research paper required.

CJA 6010 - Seminar in Law Enforcement
3 credit hours The function of police within the community and its relationship to the criminal justice system, the effects of police actions on the community and other segments of the system, social expectations and limitations, assessment and special problems. Analysis of relevant studies, formation of annotated bibliography, and organization of research into a formal composition.

CJA 6020 - Judicial Seminar
3 credit hours Examines the judicial system, including flow of the criminal case, personnel, court community relations, computers and the courts, and special problem areas. A research project consisting

of a literature review, bibliography, and a thorough analysis required.

CJA 6030 - Contemporary Corrections
3 credit hours Corrections programs in contemporary custodial and juvenile institutions and community-based corrections programs; problems and prospects associated with them. Each student required to make class presentations on assigned topics, participate in class discussions and analysis of reports, develop a bibliography, and submit a research paper in a specific area of corrections.

CJA 6100 - Principles of Emergency Management
3 credit hours Prerequisite: CJA 6000. Offers preparation for students to engage in a leadership role in emergency/crisis response. Challenges posed by disasters and other hazards, steps needed to prepare and respond to these events, and the need for a coordinated, multi-agency approach to disaster/crisis management overall.

CJA 6230 - Police Management Systems
3 credit hours The need for awareness of police management problems, reaction of criminal justice system within P.M.S., administrative behavior toward the organizational environment, and the nature of change within P.M.S. Preparation of a research paper which consists of complete analysis of a topic within P.M.S., a review of recent literature, and an annotated bibliography required.

CJA 6250 - Criminal Justice Internship
3 credit hours Prerequisite: Permission of instructor. Student placed for an intensive field experience in a functional criminal justice agency. The selection of the placement agency determined by student's background, academic status, and interest.

CJA 6300 - Innovations in Law Enforcement
3 credit hours The changing role of the police function and its relationship to the criminal justice system, including evaluation of the operational line function of the 80s, technological changes in society and their effects on law enforcement, and the etiology of innovation. Evaluation of recent literature, compilation of a list of selected readings, and unification of research into a methodological exposition.

CJA 6350 - Ethics for Criminal Justice Professionals
3 credit hours Prerequisite: CJA 6000. Examines different ethical and moral issues/dilemmas that professionals face within and outside of criminal justice systems when dealing with people who either work for or encountered the system. Explores ethical/moral issues related to crime, criminal justice practice, education, and research.

CJA 6410 - Advanced Constitutional Law
3 credit hours Examines constitutional rights of the accused including pretrial, trial, and prisoner rights. Reading and critique of current literature and Supreme Court decisions and composing a research paper with a bibliography on a chosen constitutional topic.

CJA 6411 - Intelligence Management
3 credit hours Intelligence systems and analyst management supporting criminal justice, homeland security, and private security. Intelligence planning cycle; theory and strategy role in terrorist, cyber, disaster, and policing missions; intelligence gathering, dissemination, and evaluation for government; corporate and international perspectives.

CJA 6430 - Criminal Law: The Defense Side
3 credit hours Procedure of the criminal courts from the defense viewpoint. ABA standards for defense attorneys, the handling of a case by the defense from arrest to appeal, and ethical problems posed for defense attorneys.

CJA 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

CJA 6830 - Violence and Victimology
3 credit hours Impact of violence on victims at both the adult and juvenile levels examined. Other major topics include the right to treatment, victims as witnesses, victims in the correctional system, and societal reaction to violence.

CJA 6900 - Research in the Criminal Justice Process
3 credit hours Introduces research methods, including the experiment and experimental methods and models, survey research, participant observation, case studies, unobtrusive measures, the use of official and unofficial statistics, validity, reliability, and data analysis. Special emphasis on ethics in criminal justice research and on proposal writing and evaluation research.

CJA 6910 - Qualitative Research
3 credit hours Enhances abilities to understand, plan, conduct, evaluate, and disseminate findings of qualitative research related to social sciences, criminology, and criminal justice. Reading and writing intensive. Students will conduct original research.

CJA 6911 - Homeland Security Management
3 credit hours Examines the history and foundation of managing homeland security-related responses to threats related to disasters, border, maritime, cyber, space, terrorism. Discussion of creation and influences of policies, legal considerations for training, and social and ethical issues regarding intelligence collection and program implementation. Roles of public and private sectors and military in homeland security concerns and integration of All-Hazards Homeland Security with the National Response Framework addressed.

CJA 6950 - Business and Industrial Security
3 credit hours Examines the scope of the problem, the economic impact, major problems (security, employee theft, shoplifting, industrial espionage). Discussion of the responsibility and effectiveness of the criminal justice system, programs for prevention and training of employees, managers, and security personnel. Preparation of an extensive research paper which analyzes an assigned topic and summarizes current trends in the literature required.

CJA 6990 - Graduate Capstone Course
3 credit hours Student will conduct advanced research including a comprehensive review of applicable literature and completion of a final written work product. Open only to students who will take the Master's comprehensive examination.

CJA 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Health and Human Performance

Dr. Sonya Sanderson, Chair
(615) 898-5543
www.mtsu.edu/healthhumanperf/
The Department of Health and Human Performance offers the Master of Science in Exercise Science; Leisure, Sport, and Tourism Management with concentrations in Recreation and Leisure Services and Sport Industry; the Master of Public Health with a concentration in Community Health; and the Ph.D. in Human Performance with specializations in four areas-Exercise Science; Health; Leisure, Sport, and Tourism Management; and Physical Education.
The department offers courses in Communication Disorders (CDIS).

Exercise Science, M.S.

Dr. Samantha Johnson, M.S. Advisor (A-L)
(615) 898-5847
Samantha.Johnson@mtsu.edu
Dr. Sandra Stevens, M.S. Advisor (M-Z)
(615) 494-7905
Sandra.Stevens@mtsu.edu
This four-semester degree offers preparation for candidates to gain certification through the American College of Sports Medicine and to enter terminal Exercise Science degree programs. Career opportunities include employment in clinical exercise physiology and corporate, community, or private fitness sectors. The non-thesis option requires completion of 36 semester hours including an internship. The thesis option includes 30-33 hours of coursework. The degree prerequisite is two semesters of human anatomy and physiology.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Admission decisions are based upon consideration of a number of criteria which are believed to indicate a high potential in the graduate program.
Admission to the Master of Science (M.S.) program in Exercise Science requires

1. an earned bachelor's degree from an accredited university or college, including successful completion of coursework in human anatomy and physiology;
2. an acceptable grade point average (GPA) in all college work taken;
3. completion of the Graduate Record Examination (GRE) with acceptable scores. Successful applicants to the M.S. in Exercise Science program typically have scores on the GRE Verbal and Quantitative measures that exceed 150 and 141 respectively with a combined score that exceeds 291. The Analytical Writing Assessment score is also considered.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline: Application for admission deadlines: Fall, June 1; Spring, November 1; Summer, March 1.
Application deadlines for GTA funding: Fall, February 1; Spring, October 1
Applicants must

1. submit application with appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE;
3. submit official transcripts of all previous college work;
4. provide three letters of recommendation from persons who can address their academic qualifications and potential for success in graduate study.

Degree Requirements

The Master of Science in Exercise Science requires completion of 30-33 semester hours (thesis) or 36 semester hours (non-thesis).
Candidate must

1. complete either the thesis or non-thesis curriculum as detailed below in the Curriculum section;
2. if choosing the thesis option, select a thesis committee composed of two members (at least one of whom must be from the Department of Health and Human Performance) and successfully complete an oral examination relating to the thesis;

3. if choosing the non-thesis option, successfully complete a written comprehensive examination during the last semester of coursework (may be taken no more than twice).

Curriculum: Exercise Science

The following illustrates the coursework requirements.

Thesis Option (30-33 hours)

Required courses - preferred sequence (18 hours)

- HHP 6700 - Data Analysis and Organization for Human Performance **3 credit hours**
- EXSC 6650 - Exercise Physiology **3 credit hours**
- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- EXSC 6830 - Laboratory Techniques in Exercise Science **3 credit hours**
- EXSC 6840 - Advanced Principles of Exercise Prescription and Assessment **3 credit hours**
- EXSC 6880 - Internship and Special Projects **3 to 6 credit hours (3 credit hours required)**

Approved electives (9 hours)

- Electives selected in consultation with advisor; **six hours must have EXSC prefix.**

Thesis (3-6 hours)

- EXSC 6640 - Thesis Research **1 to 6 credit hours (3-6 credit hours required)**

Non-thesis Option (36 semester hours)

Required courses (24 hours)

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- HHP 6700 - Data Analysis and Organization for Human Performance **3 credit hours**
- EXSC 6650 - Exercise Physiology **3 credit hours**
- EXSC 6830 - Laboratory Techniques in Exercise Science **3 credit hours**
- EXSC 6840 - Advanced Principles of Exercise Prescription and Assessment **3 credit hours**
- EXSC 6870 - Cardiovascular Assessment and Rehabilitation **3 credit hours**
- EXSC 6880 - Internship and Special Projects **3 to 6 credit hours (6 credit hours required)**

Approved electives (12 hours)

Twelve hours of electives selected in consultation with advisor. **Six hours must have an EXSC prefix.**

Human Performance, Ph.D.

Dr. Steve Estes, Graduate Director
(615) 898-2906
Steven.Estes@mtsu.edu
The Department of Health and Human Performance offers the Ph.D. in Human Performance with specializations in Exercise Science (for further information contact Dr. Sandra Stevens, Sandra.Stevens@mtsu.edu); Health (for further information contact Dr. Andrew Owusu, Andrew.Owusu@mtsu.edu); Leisure, Sport, and Tourism Management (for further information contact Dr. Steven Estes, Steven.Estes@mtsu.edu); and Physical Education (for further information contact Dr. Don Belcher, Don.Belcher@mtsu.edu). The Ph.D. degree is offered for the purpose of developing doctoral level expertise in research (both applied and theoretical) and as preparation for teaching at the collegiate level.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admissions decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for doctoral study. Admission decisions are based on consideration of a number of criteria that are believed to predict success in the Ph.D. program.
Admission to the Doctor of Philosophy (Ph.D.) in Human Performance program requires

1. an earned bachelor's or master's degree from an accredited university or college with an acceptable grade point average (GPA) in all college work taken. Successful applicants typically have a grade point average (GPA) on the last 60 hours of academic work of 3.00 or above on a 4.00 scale.
2. completion of the Graduate Record Examination (GRE) with acceptable scores. Successful applicants to the Ph.D. program typically have scores that exceed 297. The Analytical Writing Assessment score is also considered.
3. research skills. Successful applicants typically have statistical and research methodology skills as evidenced by coursework in both areas.
4. coursework in a related field. Applicants with a bachelor's degree will be expected to have completed at least 18 hours of coursework in a related field. Applicants with a master's degree are expected to have completed at least 20 graduate hours in a related field.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applications for Summer/Fall admission must be complete by February 1, and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicants must submit

1. application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. official scores on the Graduate Record Exam (GRE);
3. official transcripts of all previous college work;
4. three letters of recommendation from persons who can address their academic qualifications and potential for success in doctoral study and teaching ability;
5. a 400-500 word statement of purpose giving their reasons for applying to the Ph.D. program, academic interests, professional goals, and area of specialization.

Degree Requirements

The Ph.D. in Human Performance requires completion of 60-72 semester hours.
Candidates must

1. complete 60 credit hours past the master's degree (see Curriculum section below for specifics). A maximum of 12 hours from the master's degree may be transferred in from an accredited program. Two-thirds (40 semester hours) of the program must be at the 7000-level. Applicants holding only a bachelor's degree will complete the requirements for an M.S. (thesis option) in addition to the Ph.D. requirements.
2. complete a thesis or scholarly equivalent prior to admission to candidacy.
3. successfully complete preliminary examinations to advance to candidacy.
4. be enrolled in full-time study (9 semester hours) for at least one semester to fulfill residency requirements.
5. complete a dissertation and successfully defend it in the final oral examination.

Curriculum

The following illustrates the coursework requirements.

Human Performance Core Requirements (15 hours)

- HHP 7060 - Research Practicum in Human Performance **1 to 6 credit hours (3 credit hours required)**
- HHP 7080 - Professional Preparation in Human Performance **3 credit hours**
- HHP 7600 - Teaching Practicum in Human Performance **3 credit hours (3 credit hours required)**
- HHP 7700 - Advanced Data Analysis and Organization for Human Performance **3 credit hours**

Select 3 hours from the following:

- FOED 7570 - Issues in Higher Education **3 credit hours**
- FOED 7580 - The College Student **3 credit hours**
- SPSE 7551 - Instructional Development in Higher Education **3 credit hours**

Research Tools (9 hours)

Choose three courses from statistics, research design, and data analysis in consultation with advisor.

Specialization (24 hours)

A total of 24 hours coursework and independent research is to be selected in consultation with the graduate program advisor.

Dissertation (12-24 hours)

- HHP 7640 - Dissertation Research **1 to 6 credit hours (12 credit hours minimum)**

Program Notes

Pre-dissertation Advising - Upon admission to the Ph.D. program, the candidate will be assigned an advisor who (in cooperation with the graduate coordinator) will advise the student on an appropriate program of study and of any deficiencies to correct.
Preliminary Examinations - Upon completion of coursework, the candidate will be eligible to take preliminary exams. The written exams will be structured to test the student on the three content areas (research methodology

and data analysis, Ph.D. specialization area, and area of research interest). All exams are to be taken within one calendar year.

Advancement to Candidacy - No more than six credit hours of C grade will count toward the Ph.D. degree requirements. D and F grades will not count toward degree requirements but will be computed in the GPA. The student must have a GPA of 3.25 for the program of studies to advance to candidacy.

Dissertation Committee - Upon advancement to candidacy, students will formally construct their dissertation committees. The committee should include at a minimum three faculty members; two must be from the department, and one must be from outside the department. All members of the committee must have graduate faculty status.

Time Limit - There is a ten-year limit for completing all Ph.D. degree requirements, i.e., all doctoral coursework taken at MTSU, as well as the dissertation, must be completed within ten years of the first semester of enrollment.

Leisure, Sport, and Tourism Management, M.S., ABM Pathway

Dr. Steve Estes, Program Director
615-898-2907
Steven.Estes@mtsu.edu
The Department of Health and Human Performance offers an Accelerated Bachelors to Masters Pathway in Leisure, Sport, and Tourism Management, M.S., corresponding to the Leisure and Sport Management, B.S.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

Students must choose the 6 credit hours from the chart below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

MTSU Undergraduate Course	MTSU Graduate Course	Credit Hours
LSTS 4790 - Sport and Society	LSM 6530 - History and Philosophy of Leisure and Sport	3
LSTS 4250 - The Sport Agent	LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services	3

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Leisure, Sport, and Tourism Management, Recreation and Leisure Services Concentration, M.S.

Dr. Steve Estes, Program Director
(615) 898-2906
Steven.Estes@mtsu.edu
Leisure, Sport, and Tourism Management is for those who are preparing for senior-level positions in leisure and sport professions or those who are preparing for doctoral-level work in the leisure and sport fields. The two year program focuses on parks and recreation; recreational, college, and professional sport; event planning; tourism; and resort or hotel administration.
The goal of the Master's in Leisure, Sport, and Tourism Management is to prepare individuals to lead leisure and sport organizations, to support the expansion of the leisure and sport industries, and to conduct research that advances the body of knowledge in these disciplines.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Admission decisions are based upon consideration of a number of criteria which are believed to indicate a high potential in the graduate program.
Admission to the Master of Science (M.S.) program in Leisure and Sport Management requires

1. an earned bachelor's degree from an accredited university or college. Applicants must have earned at least 18 semester hours at the bachelor's or master's level in courses related to the selected concentration (e.g., foundations of leisure and sport management, management practices, financial management and marketing, program planning). Students lacking an appropriate background may be required to complete prerequisite coursework.
2. an acceptable grade point average (GPA) in all college work taken.
3. completion of the Graduate Record Examination (GRE) with acceptable scores. Successful applicants typically have scores on the GRE Verbal and Quantitative measures that exceed 146 and 140 respectively with a total score that exceeds 286. The Analytical Writing Assessment score is also considered.
4. letters from professors who can address one's ability to do graduate-level work: thinking, writing, and speaking.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline: Applications for Summer/Fall admission must be complete by April 1, and applications for Spring admission must be complete by November 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicants must

1. submit application with appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE;
3. submit official transcripts of all previous college work;
4. provide three letters of recommendation from persons (faculty/professors) who can address their academic qualifications to do graduate-level thinking, writing, speaking, and potential for success in graduate study;
5. provide a 400-word statement of purpose giving their reasons for applying to the program, their academic interests, and their professional goals.

Degree Requirements

The Master of Science in Leisure and Sport Management with a concentration in Recreation and Leisure Services requires completion of a minimum of 36 semester hours (thesis) or 36 semester hours (professional project or internship).
Candidate must

1. complete either the thesis or professional project/internship curriculum as detailed below in the Curriculum section;
2. if choosing the thesis option,
    a. select a thesis committee composed of two members (one of whom must be from the Department of Health and Human Performance);
    b. successfully complete thesis proposal;
    c. successfully complete an oral examination relating to the thesis defense.
3. if choosing the professional project or internship option, successfully complete a written comprehensive examination prior to the completion of a professional project or internship (may be taken no more than twice).

Curriculum: Leisure and Sport Management, Recreation and Leisure Services Concentration

The following illustrates the minimum coursework requirements.

Thesis Option (36 hours)

All candidates for the M.S. in Leisure and Sport Management with a concentration in Recreation and Leisure Services pursuing the thesis option must complete 36 credit hours in the following course of study:

Core Requirements (21 hours)

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services **3 credit hours**
- LSM 6530 - History and Philosophy of Leisure and Sport **3 credit hours**
- MGMT 6600 - Organization Behavior **3 credit hours**

- HHP 6700 - Data Analysis and Organization for Human Performance **3 credit hours** OR
- HHP 6620 - Foundations of Qualitative Inquiry in Health and Human Performance **3 credit hours**

- MKT 6800 - Marketing Management **3 credit hours** OR
- MKT 6880 - Sport and Entertainment Marketing **3 credit hours**

- LSM 6570 - Issues, Trends, and Research in Leisure and Sport **3 credit hours**

Concentration Electives (12 hours)

LSM Electives

Choose 6-9 hours from the following list in consultation with the advisor:

- LSM 5120 - Community Development through Leisure, Sport, and Tourism **3 credit hours**
- LSM 5130 - Sport Tourism **3 credit hours**
- LSM 5340 - Fitness Education for the Adult **3 credit hours**
- LSM 5380 - Disabilities and Diversity in Leisure, Sport and Tourism **3 credit hours**
- LSM 5470 - Leisure and Aging **3 credit hours**
- LSM 5480 - Recreational Therapy Techniques **3 credit hours**
- LSM 5490 - Campus Recreation **3 credit hours**
- LSM 5499 - Therapeutic Terminology in Recreational Therapy **3 credit hours**
- LSM 5500 - Introduction to Recreational Therapy **3 credit hours**
- LSM 5510 - Recreational Therapy in Clinical Settings **3 credit hours**
- LSM 5520 - Transitional and Community Recreational Therapy **3 credit hours**
- LSM 5540 - Organization and Administration of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5560 - Field Studies in Leisure, Sports, and Tourism **3 credit hours**
- LSM 5570 - Outdoor Recreation Workshop **3 credit hours**
- LSM 5580 - Seminar: Outdoor Recreation and Environmental Issues **3 credit hours**
- LSM 5590 - Readings in Leisure, Sport, and Tourism **3 credit hours**
- LSM 5660 - Evaluation of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5790 - Sport and Society **3 credit hours**
- LSM 5965 - Aquatic Exercise and Therapeutic Techniques **3 credit hours**
- LSM 6550 - Outdoor Environmental Education **3 credit hours**
- LSM 6570 - Issues, Trends, and Research in Leisure and Sport **3 credit hours**
- LSM 6670 - Behavioral Concepts in Leisure and Sport **3 credit hours**
- LSM 6850 - Cross-Cultural Perspectives in Leisure and Tourism **3 credit hours** (Study Abroad)
- LSM 6910 - Special Problems **1 to 3 credit hours**
- REC 5600 - Technology Applications **1 credit hours**
- REC 5601 - Technology Applications Lab **2 credit hours**
- PHED 6820 - Administration and Supervision of Physical Education and Sport **3 credit hours**

Non-LSM Electives

- Select 3-9 hours of non-LSM courses in consultation with the advisor.

Thesis Option Requirement (3 hours)

- LSM 6640 - Thesis Research **1 to 6 credit hours** (3 hours minimum requirement; no more than 3 hours apply to degree)

Professional Project or Internship Option (36 hours)

All candidates for the M.S. in Leisure and Sport Management with a concentration in Recreation and Leisure Services pursuing the professional project or internship option must complete 36 credit hours in the following course of study:

Core Requirements (21 hours)

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services **3 credit hours**
- LSM 6530 - History and Philosophy of Leisure and Sport **3 credit hours**
- MGMT 6600 - Organization Behavior **3 credit hours**

- HHP 6700 - Data Analysis and Organization for Human Performance **3 credit hours** OR
- HHP 6620 - Foundations of Qualitative Inquiry in Health and Human Performance **3 credit hours**

- MKT 6800 - Marketing Management **3 credit hours** OR
- MKT 6880 - Sport and Entertainment Marketing **3 credit hours**

- LSM 6570 - Issues, Trends, and Research in Leisure and Sport **3 credit hours**

Concentration Electives (12 hours)

LSM Electives

Choose 6-9 hours from the following list in consultation with the advisor.

- LSM 5120 - Community Development through Leisure, Sport, and Tourism **3 credit hours**
- LSM 5130 - Sport Tourism **3 credit hours**
- LSM 5340 - Fitness Education for the Adult **3 credit hours**
- LSM 5380 - Disabilities and Diversity in Leisure, Sport and Tourism **3 credit hours**
- LSM 5470 - Leisure and Aging **3 credit hours**
- LSM 5480 - Recreational Therapy Techniques **3 credit hours**
- LSM 5490 - Campus Recreation **3 credit hours**
- LSM 5499 - Therapeutic Terminology in Recreational Therapy **3 credit hours**
- LSM 5500 - Introduction to Recreational Therapy **3 credit hours**
- LSM 5510 - Recreational Therapy in Clinical Settings **3 credit hours**
- LSM 5520 - Transitional and Community Recreational Therapy **3 credit hours**
- LSM 5540 - Organization and Administration of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5560 - Field Studies in Leisure, Sports, and Tourism **3 credit hours**
- LSM 5570 - Outdoor Recreation Workshop **3 credit hours**
- LSM 5580 - Seminar: Outdoor Recreation and Environmental Issues **3 credit hours**
- LSM 5590 - Readings in Leisure, Sport, and Tourism **3 credit hours**
- LSM 5660 - Evaluation of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5965 - Aquatic Exercise and Therapeutic Techniques **3 credit hours**
- LSM 6550 - Outdoor Environmental Education **3 credit hours**
- LSM 6570 - Issues, Trends, and Research in Leisure and Sport **3 credit hours**
- LSM 6670 - Behavioral Concepts in Leisure and Sport **3 credit hours**
- LSM 6850 - Cross-Cultural Perspectives in Leisure and Tourism **3 credit hours** (Study Abroad)
- LSM 6910 - Special Problems **1 to 3 credit hours**
- PHED 6820 - Administration and Supervision of Physical Education and Sport **3 credit hours**
- REC 5600 - Technology Applications **1 credit hours**
- REC 5601 - Technology Applications Lab **2 credit hours**

Non-LSM Electives

- Select 3-9 hours of non-LSM courses in consultation with the advisor.

Professional Project/Internship Requirement (3 hours)

- LSM 6880 - Internship/Special Project **3 to 6 credit hours** (3 hours minimum requirement; no more than 3 hours apply to degree.)

Program Notes

HHP 6610 and HHP 6700 or HHP 6620 must be taken with the first year of study.
Students are strongly encouraged to take the non-LSM courses outside the department.

Leisure, Sport, and Tourism Management, Sport Industry Concentration, M.S.

Dr. Steve Estes, Program Director
(615) 898-2906
Steven.Estes@mtsu.edu
Leisure and Sport Management is for those who are preparing for senior-level positions in leisure and sport professions or those who are preparing for doctoral-level work in the leisure and sport fields. The two year program focuses on parks and recreation; recreational, college, and professional sport; event planning; tourism; and resort or hotel administration.
The goal of the Master's in Leisure and Sport Management is to prepare individuals to lead leisure and sport organizations, to support the expansion of the leisure and sport industries, and to conduct research that advances the body of knowledge in these disciplines.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Admission decisions are based upon consideration of a number of criteria which are believed to indicate a high potential in the graduate program.
Admission to the Master of Science (M.S.) program in Leisure and Sport Management requires

1. an earned bachelor's degree from an accredited university or college. Applicants must have earned at least 18 semester hours at the bachelor's or master's level in courses related to the selected concentration (e.g., foundations of leisure and sport management, management practices, financial management and marketing, program planning). Students lacking an appropriate background may be required to complete prerequisite coursework.
2. an acceptable grade point average (GPA) in all college work taken.
3. completion of the Graduate Record Examination (GRE) with acceptable scores. Successful applicants typically have scores on the GRE Verbal and Quantitative measures that exceed 146 and 140 respectively with a total combined score that exceeds 286. The Analytical Writing Assessment score is also considered;
4. letters from professors who can address one's ability to do graduate-level work: thinking, writing, and speaking.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline: Applications for Summer/Fall admission must be complete by April 1, and applications for Spring admission must be complete by November 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicants must

1. submit application with appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE;
3. submit official transcripts of all previous college work;
4. provide three letters of recommendation from persons (faculty/professors) who can address their academic qualifications to do graduate-level thinking, writing, speaking, and potential for success in graduate study;
5. provide a 400-word statement of purpose giving their reasons for applying to the program, their academic interests, and their professional goals.

Degree Requirements

The Master of Science in Leisure and Sport Management with a concentration in Sport Industry requires completion of a minimum of 36 semester hours (thesis) or 36 semester hours (professional project or internship).
Candidate must

1. complete either the thesis or professional project/internship curriculum as detailed below in the Curriculum section.
2. if choosing the thesis option,
    a. select a thesis committee composed of two members (one of whom must be from the Department of Health and Human Performance);
    b. successfully complete thesis proposal;
    c. successfully complete an oral examination relating to the thesis defense.
3. if choosing the professional project or internship option, successfully complete a written comprehensive examination prior to the completion of a professional project or internship (may be taken no more than twice).

Curriculum: Leisure and Sport Management, Sport Industry Concentration

The following illustrates the coursework requirements.

Thesis Option (36 hours)

Core Requirements (21 hours)

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services **3 credit hours**
- LSM 6530 - History and Philosophy of Leisure and Sport **3 credit hours**
- MGMT 6600 - Organization Behavior **3 credit hours**

- HHP 6700 - Data Analysis and Organization for Human Performance **3 credit hours** OR
- HHP 6620 - Foundations of Qualitative Inquiry in Health and Human Performance **3 credit hours**

- MKT 6800 - Marketing Management **3 credit hours** OR
- MKT 6880 - Sport and Entertainment Marketing **3 credit hours**

- LSM 6570 - Issues, Trends, and Research in Leisure and Sport **3 credit hours**

Concentration Electives (12 hours)

LSM Electives

Select 6-9 hours from the following list in consultation with the advisor:

- LSM 5120 - Community Development through Leisure, Sport, and Tourism **3 credit hours**
- LSM 5130 - Sport Tourism **3 credit hours**
- LSM 5340 - Fitness Education for the Adult **3 credit hours**
- LSM 5380 - Disabilities and Diversity in Leisure, Sport and Tourism **3 credit hours**
- LSM 5470 - Leisure and Aging **3 credit hours**
- LSM 5480 - Recreational Therapy Techniques **3 credit hours**

- LSM 5490 - Campus Recreation **3 credit hours**
- LSM 5499 - Therapeutic Terminology in Recreational Therapy **3 credit hours**
- LSM 5500 - Introduction to Recreational Therapy **3 credit hours**
- LSM 5510 - Recreational Therapy in Clinical Settings **3 credit hours**
- LSM 5520 - Transitional and Community Recreational Therapy **3 credit hours**
- LSM 5540 - Organization and Administration of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5560 - Field Studies in Leisure, Sports, and Tourism **3 credit hours**
- LSM 5570 - Outdoor Recreation Workshop **3 credit hours**
- LSM 5580 - Seminar: Outdoor Recreation and Environmental Issues **3 credit hours**
- LSM 5590 - Readings in Leisure, Sport, and Tourism **3 credit hours**
- LSM 5660 - Evaluation of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5790 - Sport and Society **3 credit hours**
- LSM 5965 - Aquatic Exercise and Therapeutic Techniques **3 credit hours**
- LSM 6550 - Outdoor Environmental Education **3 credit hours**
- LSM 6710 - The Sport Industry **3 credit hours**
- LSM 6720 - Event Planning, Promotion, and Fundraising in Leisure and Sport **3 credit hours**
- LSM 6730 - Socio-Cultural and Ethical Issues in Leisure and Sport **3 credit hours**
- LSM 6850 - Cross-Cultural Perspectives in Leisure and Tourism **3 credit hours** (Study Abroad)
- LSM 6910 - Special Problems **1 to 3 credit hours**
- PHED 6820 - Administration and Supervision of Physical Education and Sport **3 credit hours**
- REC 5600 - Technology Applications **1 credit hours**
- REC 5601 - Technology Applications Lab **2 credit hours**

Non-LSM Electives

- Select 3-6 hours of non-LSM courses in consultation with the advisor.

Thesis Option Requirement (3 hours)

- LSM 6640 - Thesis Research **1 to 6 credit hours** (3 hours minimum requirement; no more than 3 hours apply to degree.)

Professional Project or Internship Option (36 hours)

All candidates for the M.S. in Leisure and Sport Management with a concentration in Sport Industry pursuing the professional project or internship option must complete 36 credit hours in the following course of study:

Core Requirements (21 hours)

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services **3 credit hours**
- LSM 6530 - History and Philosophy of Leisure and Sport **3 credit hours**
- MGMT 6600 - Organization Behavior **3 credit hours**

- HHP 6700 - Data Analysis and Organization for Human Performance **3 credit hours** OR
- HHP 6620 - Foundations of Qualitative Inquiry in Health and Human Performance **3 credit hours**

- MKT 6800 - Marketing Management **3 credit hours** OR
- MKT 6880 - Sport and Entertainment Marketing **3 credit hours**

- LSM 6570 - Issues, Trends, and Research in Leisure and Sport **3 credit hours**

Concentration Electives (12 hours)

LSM Electives

Choose 6-12 hours from the following list in consultation with the advisor:

- LSM 5120 - Community Development through Leisure, Sport, and Tourism **3 credit hours**
- LSM 5130 - Sport Tourism **3 credit hours**
- LSM 5340 - Fitness Education for the Adult **3 credit hours**
- LSM 5380 - Disabilities and Diversity in Leisure, Sport and Tourism **3 credit hours**
- LSM 5470 - Leisure and Aging **3 credit hours**
- LSM 5480 - Recreational Therapy Techniques **3 credit hours**
- LSM 5490 - Campus Recreation **3 credit hours**
- LSM 5499 - Therapeutic Terminology in Recreational Therapy **3 credit hours**
- LSM 5500 - Introduction to Recreational Therapy **3 credit hours**
- LSM 5510 - Recreational Therapy in Clinical Settings **3 credit hours**
- LSM 5520 - Transitional and Community Recreational Therapy **3 credit hours**
- LSM 5540 - Organization and Administration of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5560 - Field Studies in Leisure, Sports, and Tourism **3 credit hours**
- LSM 5570 - Outdoor Recreation Workshop **3 credit hours**
- LSM 5580 - Seminar: Outdoor Recreation and Environmental Issues **3 credit hours**
- LSM 5590 - Readings in Leisure, Sport, and Tourism **3 credit hours**
- LSM 5660 - Evaluation of Leisure, Sport, and Tourism **3 credit hours**
- LSM 5790 - Sport and Society **3 credit hours**
- LSM 5965 - Aquatic Exercise and Therapeutic Techniques **3 credit hours**
- LSM 6550 - Outdoor Environmental Education **3 credit hours**
- LSM 6710 - The Sport Industry **3 credit hours**
- LSM 6720 - Event Planning, Promotion, and Fundraising in Leisure and Sport **3 credit hours**
- LSM 6730 - Socio-Cultural and Ethical Issues in Leisure and Sport **3 credit hours**
- LSM 6850 - Cross-Cultural Perspectives in Leisure and Tourism **3 credit hours** (Study Abroad)
- LSM 6910 - Special Problems **1 to 3 credit hours**
- PHED 6820 - Administration and Supervision of Physical Education and Sport **3 credit hours**
- REC 5600 - Technology Applications **1 credit hours**
- REC 5601 - Technology Applications Lab **2 credit hours**

Non-LSM Electives

- Select 3-9 hours of non-LSM electives in consultation with the advisor.

Professional Project or Internship Option Requirement (3 hours)

- LSM 6880 - Internship/Special Project **3 to 6 credit hours**

Program Notes

HHP 6610 and HHP 6700 or HHP 6620 must be taken within the first semester of study.
Students are strongly encouraged to take the non-LSM courses outside the department.

Public Health, Community Health Concentration, M.P.H.

Andrew Owusu, Program Director
(615) 898-5878
Andrew.Owusu@mtsu.edu
The Public Health program with a concentration in Community Health offers preparation for a wide range of roles and settings within the public health arena, including non-governmental and governmental agencies at international, national, state, and local levels.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Admission decisions are based upon consideration of a number of criteria which are believed to indicate a high potential in the graduate program.
Admission to the Master of Public Health (MPH) program requires

1. An earned bachelor's degree from an accredited university or college. The candidate must have earned undergraduate prerequisites of at least 18 semester hours in public health or health and human performance professional courses or have a baccalaureate degree in an area determined by the admissions committee to be related to the competencies required in the field of public health;
2. An acceptable grade point average (GPA) in all college work taken;
3. Completion of the Graduate Record Examination (GRE) with acceptable scores. GMAT or MCAT scores can be considered in lieu of the GRE. Successful applicants to the Master of Public Health program typically have scores on the GRE Verbal and Quantitative measures which exceed 146 and 140 respectively with a total combined score that exceeds 286. The Analytical Writing Assessment score is also considered.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline: Applications for Summer/Fall admission must be complete by February 1, and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicants must

1. submit application with appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE (GMAT or MCAT considered; check for waiver);
3. submit official transcripts of all previous college work;
4. provide three letters of recommendation from persons who can address their academic qualifications and potential for success in graduate study;
5. provide a 400-word statement of purpose giving their reasons for applying to the program, their academic interests, and their professional goals.

Degree Requirements

The Master of Public Health with a concentration in Community Health requires completion of a minimum of 42 semester hours.
To graduate from the MPH program, candidate must complete either the non-thesis or thesis curriculum to meet Integrative Learning Experience (ILE) requirements. ILE is completed at or near the end of program study (final year or semester).

Non-thesis option:

- Successfully complete six (6) credit hours of internship and a related comprehensive report that meets the Integrative Learning Experience (ILE) requirement.

Thesis option:

- Select a thesis committee composed of a minimum of two members (one of whom must be from the Department of Health and Human Performance);
- Complete a minimum of six (6) thesis credit hours. Candidate must also successfully complete an oral examination relating to the thesis.

Curriculum: Public Health, Community Health

The following illustrates the minimum coursework requirements.

Thesis Option (42 hours)

Public Health Core Requirements (18 hours)

- HLTH 6102 - Theory of Health Education and Behavior **3 credit hours**
- HLTH 6200 - Principles of Environmental Health **3 credit hours**
- HLTH 6510 - The Nation's Health **3 credit hours**
- HLTH 6710 - Applied Biostatistics for Public Health **3 credit hours**
- HLTH 6850 - Methods in Epidemiology **3 credit hours**
- HLTH 6860 - Program Planning for Health Promotion **3 credit hours**

Community Health Concentration (9 hours)

Substitutions must be approved by advisor.

- HLTH 6750 - Applied Survey Methodology for Public Health **3 credit hours**
- HLTH 6870 - Health Promotion **3 credit hours**
- HLTH 6890 - Social Epidemiology and Population Health **3 credit hours**

Guided Electives (6 hours)

Chosen in consultation with advisor.

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- HLTH 5270 - Bioethical Issues in Health Education **3 credit hours**
- HLTH 5450 - Technology Applications **1 credit hours**
- HLTH 5451 - Technology Applications Lab **2 credit hours**
- HLTH 6320 - Global Health **3 credit hours**
- HLTH 6350 - Spatial Epidemiology **3 credit hours credit hours**
- HLTH 6851 - Advanced Methods in Epidemiology **3 credit hours**
- HLTH 6855 - Field Epidemiology **3 credit hours**
- MGMT 6780 - Health Care Management **3 credit hours**
- PSY 5630 - Death and Dying **3 credit hours**
- NFS 6100 - Advanced Studies in Food and Culture **3 credit hours**
- NFS 6600 - Nutrition and Obesity **3 credit hours**

Practicum Experience (3 hours)

- HLTH 6910 - Special Problems **1 to 3 credit hours (3 credit hours required)**

Thesis (6 hours)

- HLTH 6640 - Thesis Research **1 to 6 credit hours (6 credit hours required)**

Non-thesis Option (42 hours)

Public Health Core Requirements (18 hours)

- HLTH 6102 - Theory of Health Education and Behavior **3 credit hours**
- HLTH 6200 - Principles of Environmental Health **3 credit hours**
- HLTH 6510 - The Nation's Health **3 credit hours**
- HLTH 6710 - Applied Biostatistics for Public Health **3 credit hours**
- HLTH 6850 - Methods in Epidemiology **3 credit hours**
- HLTH 6860 - Program Planning for Health Promotion **3 credit hours**

Community Health Concentration (9 hours)

Substitutions approved by advisor

- HLTH 6750 - Applied Survey Methodology for Public Health **3 credit hours**
- HLTH 6870 - Health Promotion **3 credit hours**
- HLTH 6890 - Social Epidemiology and Population Health **3 credit hours**

Guided Electives (6 hours)

Chosen in consultation with advisor.

- HHP 6610 - Research Methods in Health and Human Performance **3 credit hours**
- HLTH 5270 - Bioethical Issues in Health Education **3 credit hours**
- HLTH 5450 - Technology Applications **1 credit hours**
- HLTH 5451 - Technology Applications Lab **2 credit hours**
- HLTH 6320 - Global Health **3 credit hours**
- HLTH 6350 - Spatial Epidemiology **3 credit hours credit hours**
- HLTH 6851 - Advanced Methods in Epidemiology **3 credit hours**
- HLTH 6855 - Field Epidemiology **3 credit hours**
- MGMT 6780 - Health Care Management **3 credit hours**
- PSY 5630 - Death and Dying **3 credit hours**
- NFS 6600 - Nutrition and Obesity **3 credit hours**
- NFS 6100 - Advanced Studies in Food and Culture **3 credit hours**

Practicum Experience (3 hours)

- HLTH 6910 - Special Problems **1 to 3 credit hours (3 credit hours required)**

Graduate Project (6 hours)

- HLTH 6880 - Internship and Special Projects **3 to 6 credit hours (6 credit hours required)**

Public Health, M.P.H, ABM Pathway

Andrew Owusu, Program Director
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The Department of Health and Human Performance offers an Accelerated Bachelors to Masters Pathway in Public Health, M.P.H., corresponding to the Community and Public Health, B.S.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

Students must choose the 12 credit hours from the chart below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

MTSU Undergraduate Course	MTSU Graduate Course	Credit Hours
HLTH 4270 - Bioethical Issues in Public Health	HLTH 5270 - Bioethical Issues in Public Health	3
HLTH 4450/4451 - Technology Applications/Lab	HLTH 5450/5451 - Technology Applications/Lab	3
HLTH 3260 - Environmental Health	HLTH 6200 - Principles of Environmental Health	3
HLTH 4430 - Program Planning in Health Education	HLTH 6860 - Program Planning in Health Education	3

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Athletic Coaching

ATHC 5060 - Sport Psychology
3 credit hours (Same as PSY 5060.) Application of the knowledge base of psychology to the human endeavors of athletics. Introduction of behavioral principles, motivational research, personality factors, social/psychological findings, cognitive processes, dysfunctional behavior knowledge, and psychometric assessment procedures for the purpose of enhancing performance.

ATHC 5180 - Coaching Speed and Strength Conditioning for Sports
3 credit hours Organizing and developing speed and strength conditioning programs for sports. Setting up and supervising proper methods and techniques in running, weight lifting, and conditioning exercise for athletics today.

ATHC 5220 - Coaching Soccer
2 credit hours Theory and practice of soccer fundamentals as well as introduction of offensive and defensive plays.

ATHC 5600 - Advanced Coaching of Football
2 credit hours Philosophies of coaching football and close examination of the master plan of coaching responsibilities.

ATHC 5620 - Advanced Coaching of Basketball
2 credit hours Philosophies of coaching basketball discussed, along with a detailed study of the master plan of coaching responsibilities.

ATHC 5640 - Coaching of Baseball
2 credit hours Theory and practice in baseball fundamentals as well as reviewing the various systems and types of plays.

ATHC 5650 - Coaching Cross-Country, Track and Field
2 credit hours Theory and practice in fundamentals and skills.

ATHC 5690 - Psychology of Coaching
3 credit hours Application of basic psychological principles to everyday coaching situations and problems. Designed to improve communication and motivation for players and coaches.

ATHC 5800 - Administration of High School and College Athletics
3 credit hours National, state, and local policies concerning athletic eligibility, contest management, equipment, awards, finances, budgets, safety, maintenance of facilities, public relations, publicity, and current athletic trends.

Athletic Training

ATHT 5610 - Prevention and Care of Athletic Injuries
3 credit hours Theory and practice in the prevention and care of athletic injuries including treatment, taping, and rehabilitation.

ATHT 5960 - Rehabilitation Techniques in Sports Medicine
3 credit hours Methods and techniques in the selection and application. The N.A.T.A. Competencies in Athletic Training will be a guideline for knowledge that each student should obtain. Students will engage in the process of reviewing, analyzing, discussing, and reflecting about athletic training.

ATHT 5965 - Aquatic Exercise and Therapeutic Techniques
3 credit hours (Same as EXSC 5965.) Examines the various uses of the aquatic environment to develop, maintain, and improve physical performance with practical development of skills and techniques and aquatic exercise programming. Combines both didactic and laboratory activities in an experiential learning environment.

ATHT 5970 - Therapeutic Modalities in Sports Medicine
3 credit hours Methods and techniques in the application of selected therapeutic modalities and the evaluation of injuries relative to modalities. The N.A.T.A. Competencies in Athletic Training will be a guideline for knowledge that each student should obtain. Reviewing, analyzing, discussing, synthesizing, and reflecting about athletic training.

ATHT 6020 - Somatic Therapy Techniques for Health Care Providers
3 credit hours (Same as HLTH 6020.) Examines the concepts, knowledge, theories, and history of somatic therapy. Emphasis on Swedish-Esalen, sports massage, Shiatsu, and connective tissue. Includes advanced rehabilitative and therapeutic modality

techniques and combines didactic and some experiential opportunities.

Communication Disorders

CDIS 5000 - Language Development, Speech, and Literacy
2 credit hours Introduces development of language, language production, and language perception, and how these processes are related to literacy development. Stages of language development, reading acquisition, word recognition, and language and reading disorders.

CDIS 5250 - Speech and Language Development
3 credit hours Child speech and language acquisition from birth to seven years of age. Emphasis on normal linguistic development.

CDIS 5260 - Language Acquisition and Analysis
3 credit hours Study of language development and procedures for analyzing child language. Semantic, syntactic, and pragmatic development will be explored through examining child language transcripts.

CDIS 5800 - Speech and Language Disorders in the Adult Population
3 credit hours Overview of the impact of age on communication. Identification and remediation of communication problems associated with the aging process.

CDIS 6000 - Speech, Language, and Literacy Development
3 credit hours Addresses the acquisition of English as a first language. Acquisition of language and its subsystems detailed; competing theoretical explanations presented.

Exercise Science

EXSC 5000 - Strength, Conditioning, and Human Performance
3 credit hours Prerequisites: Anatomy, physiology, kinesiology, and weight training or permission of instructor. Theories and principles of strength training and conditioning and techniques used to become a certified strength and conditioning specialist or personal trainer.

EXSC 5240 - Principles of Exercise Prescription and Assessment
3 credit hours Prerequisite: EXSC 3830. Application of knowledge gained to practical situations; develop proficiency in using equipment and skills to evaluate an individual's health risks and fitness.

EXSC 5965 - Aquatic Exercise and Therapeutic Techniques
3 credit hours (Same as ATHT 5965.) Examines the various uses of the aquatic environment to develop, maintain, and improve physical performance with practical development of skills and techniques and aquatic exercise programming. Combines both didactic and laboratory activities in an experiential learning environment.

EXSC 6200 - Applied Human Work Physiology
3 credit hours
Prerequisite: EXSC 6650. Investigation of how the physiological response to exercise is impacted by intensity, duration, type of muscular contraction, limbs involved, and body position.

EXSC 6640 - Thesis Research
1 to 6 credit hours (Same as HLTH 6640/PHED 6640/LSM 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

EXSC 6650 - Exercise Physiology
3 credit hours Principles of exercise physiology. Acute responses and chronic adaptations of the body to physical activity, exercise, and sports participation and their impact on homeostasis examined. Physiological systems examined in detail.

EXSC 6750 - Exercise Physiology for the Child and Adolescent
3 credit hours Prerequisite: EXSC 4830 or EXSC 6650. Review, analysis, and synthesis of current knowledge and literature about the exercise responses of children. Emphasis on understanding the influence of physical growth and measurement on the mechanisms which underlie the developing functional capacities of the exercising child and adolescent.

EXSC 6800 - Environmental Exercise Physiology
3 credit hours Prerequisite: EXSC 6650. Examines how the human body responds and adapts to diverse forms of environmental stress during exercise. Emphasis on delineating the mechanisms which underlie immediate responses and long-term adaptations that humans make while exercising under various environmental conditions.

EXSC 6810 - Cardiovascular Exercise Physiology
3 credit hours Prerequisite: EXSC 6650. Overview of the physiological and biophysical mechanisms underlying cardiac function. Neurochemical properties of the myocardial cell, the physiological basis of cardiac muscle function, and the overall performance of the intact heart during exercise.

EXSC 6830 - Laboratory Techniques in Exercise Science
3 credit hours Laboratory experiences in testing, evaluating, and reporting in exercise science. Measurement theory related to validity and reliability of assessments addressed.

EXSC 6840 - Advanced Principles of Exercise Prescription and Assessment
3 credit hours Prerequisite: EXSC 4240 or EXSC 6650 or equivalent. Provides theoretical and laboratory learning experiences for health risk appraisal, cardiovascular evaluation, and exercise prescription for healthy people and special populations.

EXSC 6850 - Physical Activity, Exercise, and Disease
3 credit hours Prerequisite: EXSC 6650 or equivalent. In-depth survey and synthesis of the research literature examining historical and recent trends in physical activity participation and the health-related aspects of exercise, physical activity, and physical fitness. Physiological mechanisms underlying the positive effects of physical activity and exercise on risk reduction for disease identified and explored. Behavioral and environmental determinants of physical activity and regular participation in exercise reviewed.

EXSC 6870 - Cardiovascular Assessment and Rehabilitation
3 credit hours Prerequisite: EXSC 6650 or equivalent. Overview of the cardiopulmonary system and clinical rehabilitation. Laboratory experiences include cardiopulmonary function assessments, cardiac rhythm interpretation, and standard rehabilitation practices.

EXSC 6880 - Internship and Special Projects
3 to 6 credit hours (Same as HLTH 6880/PHED 6880/LSM 6880.) On-site practical experience in an exercise science, health promotion, or sport management program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

EXSC 6890 - Seminar in Exercise Science
3 credit hours Prerequisite: EXSC 6650 with C or better. Current issues and research in exercise science and health promotion. Written and oral presentation of a research project required. Can be repeated for maximum 6 hours credit.

EXSC 6910 - Special Problems
1 to 3 credit hours (Same as HLTH 6910/PHED 6910/LSM 6910.) Individual study of current problems or areas of interest. S/U grading.

EXSC 7100 - Mechanical Analysis of Sports Skills
3 credit hours A synthesis of scientific principles as they relate to teaching simple and complex motor patterns.

EXSC 7200 - Applied Human Work Physiology
3 credit hours Prerequisite: EXSC 6650. Investigation of how the physiological response to exercise is impacted by intensity, duration, type of muscular contraction, limbs involved, and body position.

EXSC 7750 - Exercise Physiology for the Child and Adolescent
3 credit hours Prerequisite: EXSC 4830 or EXSC 6650. Review, analysis, and synthesis of current knowledge and literature about the exercise responses of children. Emphasis on understanding the influence of physical growth and measurement on the mechanisms which underlie the developing functional capacities of the exercising child and adolescent.

EXSC 7800 - Environmental Exercise Physiology
3 credit hours Prerequisite: EXSC 6650. Examines how the human body responds and adapts to diverse forms of environmental stress during exercise. Emphasis on delineating the mechanisms which underlie immediate responses and long-term

adaptations that humans make while exercising under various environmental conditions.

EXSC 7850 - Physical Activity, Exercise, and Disease
3 credit hours Prerequisite: EXSC 6650 or equivalent. In-depth survey and synthesis of the research literature examining historical and recent trends in physical activity participation and the health-related aspects of exercise, physical activity, and physical fitness. Physiological mechanisms underlying the positive effects of physical activity and exercise on risk reduction for disease identified and explored. Behavioral and environmental determinants of physical activity and regular participation in exercise reviewed.

Health

HLTH 5270 - Bioethical Issues in Health Education
3 credit hours Analysis of current bioethical issues, problems, needs, trends, and interests in health education.

HLTH 5280 - Instructor Course: First Aid and CPR
2 credit hours Prerequisite: HLTH 3300 or current American Red Cross certification in multimedia first aid or standard first aid and CPR. Organizing, planning, and teaching American Red Cross safety courses. Red Cross instructor certification awarded for successful completion.

HLTH 5340 - Fitness Education for the Adult
3 credit hours (Same as PHED 5340.) Planning, teaching, and participating in individual and group fitness programs for the adult. Administers and interprets assessments of related components with an understanding of physiological principles related to exercise in the adult. Major lifetime wellness activities covered.

HLTH 5400 - Drugs and Violence in Health Education
3 credit hours Offers an understanding of the nature of drugs, relationships people form with drugs, and consequences of those relationships. Relationship of drugs to acts of violence considered as well as educational programs addressing issues related to drug use/abuse and acts of violence.

HLTH 5450 - Technology Applications
1 credit hours Prerequisite: Introductory course in computer literacy or equivalent with instructor permission. Corequisite: HLTH 5451. Focus on understanding of and competency in use of a variety of technology applications related to the profession. Students required to enroll in the corresponding lab during the same semester.

HLTH 5451 - Technology Applications Lab
2 credit hours Investigation and application of profession-specific software and hardware applications.

HLTH 5700 - Coordinated School Health
3 credit hours Prerequisite: HLTH 4300 or equivalent or permission of instructor. Preparation for those who aspire to become school health coordinators. Major emphasis on comprehensive school health and how it fits into K-12 education.

HLTH 5900 - Certified Health Education Specialist (CHES) Review
1 credit hours Responsibilities and competencies on the Certified Health Education Specialist examination. Pass/Fail.

HLTH 6000 - Stress Management in Health and Health Promotion
3 credit hours Evaluation techniques and instruments considered. Effects of stress on physical and mental domains of health examined. Methods of conducting stress management workshops and classes emphasized.

HLTH 6010 - Holistic and Complementary Health Care
3 credit hours Concepts and theories that make up the disciplines and practices constituting the holistic and complementary approach to health promotion and disease treatment and prevention.

HLTH 6020 - Somatic Therapy Techniques for Health Care Providers
3 credit hours (Same as ATHT 6020.) Theoretical concepts, knowledge, theories, and history of somatic therapy. Emphasis on Swedish-Esalen, sports massage, Shiatsu, and connective tissue. Includes advanced rehabilitative and therapeutic modality techniques. Combines didactic and some experiential opportunities.

HLTH 6102 - Theory of Health Education and Behavior
3 credit hours (Same as PSY 6102.) Links behavioral change theory to the research and practice

of interventions in health behaviors. Application of the theoretical constructs linked to design, implementation, and evaluation of individual and group behavioral change programs.

HLTH 6200 - Principles of Environmental Health
3 credit hours The effects of environment and occupations on health discussed. Considers such factors as solid waste, water, wastewater, insects, rodents, noise, and occupation. Discusses the historical background of human ecology, communicable disease control, and special programs and problems in public health.

HLTH 6320 - Global Health
3 credit hours Explores patterns of medical care delivery and public health practices; factors that inhibit or enable the reduction of excess morbidity, mortality, and disease among the poor; threats to health resulting from economic crises, unhealthy environments, and risky behaviors; and demographic influences on the status of health around the world.

HLTH 6350 - Spatial Epidemiology
3 credit hours credit hours Lecture and laboratory-based course to learn and apply geographic information systems (GIS) in public health science using spatial data and descriptive epidemiologic methods.

HLTH 6500 - Pathopharmacology in Health and Human Performance
3 credit hours Etiology and pathology of disease and how functional physiological changes affect health and human performance. Involves the study of pharmacological considerations used in the treatment of disease and musculoskeletal conditions.

HLTH 6510 - The Nation's Health
3 credit hours Investigates the determinants of health and the role of public health and health care on the health status of the population of the United States. Study of biological, socioeconomic, cultural, and behavioral factors that influence health status and care in America.

HLTH 6640 - Thesis Research
1 to 6 credit hours (Same as EXSC 6640/PHED 6640/LSM 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

HLTH 6710 - Applied Biostatistics for Public Health
3 credit hours Prerequisite: Admitted to MPH program or permission of instructor. Applied practical problem-based approaches to commonly used public health statistics. Emphasis on data dissemination to non-technical and expert audiences, such as creation of technical reports and infographics. Data analyzed using statistical and data visualization software.

HLTH 6750 - Applied Survey Methodology for Public Health
3 credit hours Prerequisite: HLTH 6710 or HHP 6700 or equivalent or permission of instructor. Strategies of questionnaire design, administration, analysis, and interpretation in a public health context. Topics include survey sampling, item development, classical test theory and item response theory applications, and culminates in a survey design project in the student's area of research.

HLTH 6850 - Methods in Epidemiology
3 credit hours Principles and methods of epidemiologic analysis including standardization; stratified analysis; confounding and its control; planning and conducting epidemiologic research; role of multivariate analysis in epidemiologic research.

HLTH 6851 - Advanced Methods in Epidemiology
3 credit hours Prerequisites: HLTH 6850 and HLTH 6710/HLTH 7710. Applies the concepts, principles, and methods of epidemiology to public health practice and research. Intended to provide a solid conceptual framework building on HLTH 6850.

HLTH 6855 - Field Epidemiology
3 credit hours Prerequisite: HLTH 6850. Focuses on epidemiologic methods used by field epidemiologists to conduct outbreak investigations and emergency epidemiology.

HLTH 6860 - Program Planning for Health Promotion
3 credit hours Program planning, theories and models of health education and promotion, development of interventions, and program implementation, including mission, goals, objectives, and activities of health education and promotion programs. Introduces needs assessment and program evaluation.

HLTH 6870 - Health Promotion
3 credit hours Health promotion knowledge as well as the ability to impart this knowledge to the lay population. In-depth information will be covered regarding lifestyle and its relationship to risk factors for cardiovascular disease and cancer.

HLTH 6880 - Internship and Special Projects
3 to 6 credit hours (Same as EXSC 6880/PHED 6880/LSM 6880.) On-site practical experience in an exercise science, health promotion, or sport management program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

HLTH 6890 - Social Epidemiology and Population Health
3 credit hours Prerequisites: HLTH 6102 and HLTH 6850. Overview of concepts and research related to impact of social determinants on population health including how society, politics, cultural, and economics influence health outcomes. Social science theory and rigorous epidemiological methods connecting social and health inequalities examined.

HLTH 6910 - Special Problems
1 to 3 credit hours (Same as EXSC 6910/PHED 6910/LSM 6910.) Individual study of current problems or areas of interest. S/U grading.

HLTH 6930 - Principles and Philosophy of School Health Education Programs
3 credit hours A detailed overview.

HLTH 6950 - Advanced Methods of Community Health Education
3 credit hours Review of program planning, development of interventions, and implementation of programs. Budgeting, needs assessment, and evaluation of health education and promotion programs covered.

HLTH 6970 - Advanced Methods in Human Sexuality Education
3 credit hours Methodology, teaching techniques, and the organization of sexuality education programs for schools (K-12) and other community settings. Additional emphasis directed to concepts and information about human sexuality education, i.e., the psychological, physiological, sociological, and ethical aspects.

HLTH 7120 - Research in Epidemiology
3 credit hours Advanced study in epidemiological analysis, methods, and critique with an emphasis within the field of health and human performance. Areas include epidemiology and chronic disease, public health, exercise science, and sports medicine.

HLTH 7200 - Principles of Environmental Health
3 credit hours The effects of environment and occupations on health discussed. Considers such factors as solid waste, water, wastewater, insects, rodents, noise, and occupation. Discusses the historical background of human ecology, communicable disease control, and special programs and problems in public health.

HLTH 7350 - Spatial Epidemiology
3 credit hours Learn and apply geographic information systems (GIS) in public health science using spatial data and descriptive epidemiologic methods. Lecture/lab.

HLTH 7710 - Applied Biostatistics for Public Health
3 credit hours Prerequisite: Admission to MPH program or permission of instructor. Applied practical problem-based approaches to commonly used public health statistics. Emphasis on data dissemination to non-technical and expert audiences, such as creation of technical reports and infographics. Data analyzed using statistical and data visualization software.

HLTH 7750 - Applied Survey Methodology for Public Health
3 credit hours Prerequisite: HLTH 6710 or HHP 6700 or equivalent or permission of instructor. Strategies of questionnaire design, administration, analysis, and interpretation in a public health context. Topics include survey sampling, item development, classical test theory and item response theory applications, and culminates in a survey design project in the student's area of research.

HLTH 7851 - Advanced Methods in Epidemiology
3 credit hours Prerequisites: HLTH 6850 and HLTH 6710/HLTH 7710. Applies the concepts, principles, and methods of epidemiology to public health practice and research. Intended to provide a solid conceptual framework building on HLTH 6850.

HLTH 7855 - Field Epidemiology
3 credit hours Prerequisite: HLTH 6850. Focuses on epidemiologic methods used by field epidemiologists

to conduct outbreak investigations and emergency epidemiology.

HLTH 7890 - Social Epidemiology and Population Health
Social Epidemiology credit hours Overview of concepts and research related to impact of social determinants on population health including how society, politics, cultural, and economics influence health outcomes. Social science theory and rigorous epidemiological methods connecting social and health inequalities examined.

Health and Human Performance

HHP 6020 - University Leadership in Health and Human Performance
3 credit hours Discussion of the principles of leadership and leader development; provides students with a broad base of workable administrative principles and guides that manifest themselves in the leader skills of the student.

HHP 6100 - Qualitative Writing Workshop in Health and Human Performance
3 credit hours Prerequisites: HHP 6620/HHP 7620, SOC 6720, SPSE 7180, or permission of department. Explores the theoretical, ethical, and practical issues involved in transforming qualitative data into a written research report. Students will write representations of data they have already collected. Repeatable up to 6 hours.

HHP 6610 - Research Methods in Health and Human Performance
3 credit hours Location of information, methods of research, methods of collecting data, application of the computer in analyzing data, and preparation and presentation of a research paper.

HHP 6620 - Foundations of Qualitative Inquiry in Health and Human Performance
3 credit hours Exposes students to the disciplinary and conceptual origins of qualitative inquiry in the social sciences while exploring various methods of data generation and analysis in the field of health and human performance. Students will be exposed to conventional methods of data generation and analysis as well as more recent, unconventional qualitative methods. Provides preparation to consume, critique, and design research projects using some of the tools offered by qualitative inquiry.

HHP 6700 - Data Analysis and Organization for Human Performance
3 credit hours Pertinent skills needed to analyze and organize research data through introduction of concepts, principles, techniques, and activities that lead to the appropriate organization and analysis of research data collected for health and human performance.

HHP 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

HHP 7020 - University Leadership in Health and Human Performance
3 credit hours Provides administrators and professional students with a broad base of workable leadership principles and guides.

HHP 7030 - Research Seminar in Human Performance
3 credit hours Current problems, issues, trends, and research in human performance; selected lectures, reports, and class discussion.

HHP 7060 - Research Practicum in Human Performance
1 to 6 credit hours Research experience under the direct supervision of a graduate faculty member resulting in the submission of a manuscript to a refereed journal or a grant to a funding agency.

HHP 7080 - Professional Preparation in Human Performance
3 credit hours Review of the current trends within the academic scope of teaching research and service.

HHP 7100 - Qualitative Writing Workshop in Health and Human Performance
3 credit hours Prerequisites: HHP 6620/HHP 7620, SOC 6720, SPSE 7180, or permission of department. Explores the theoretical, ethical, and practical issues involved in transforming qualitative data into a written research report. Students will write representations of data they have already collected. Repeatable up to 6 hours.

HHP 7600 - Teaching Practicum in Human Performance
3 credit hours Teaching experience under the direct supervision of graduate faculty member in a three-credit undergraduate course within the student's area of specialization. May be repeated once for a maximum of 6 credit hours. S/U grading.

HHP 7610 - Practicum in Human Performance
2 credit hours Careful supervision given to actual teaching, clinical, or research experience. Assignment by department or chair of candidate's committee. S/U grading.

HHP 7620 - Foundations of Qualitative Inquiry in Health and Human Performance
3 credit hours Prerequisite: HHP 6610. Exposes students to the disciplinary and conceptual origins of qualitative inquiry in the social sciences while exploring various methods of data generation and analysis in the field of health and human performance. Students will be exposed to conventional methods of data generation and analysis as well as more recent, unconventional qualitative methods. Provides preparation to consume, critique, and design research projects using some of the tools offered by qualitative inquiry.

HHP 7640 - Dissertation Research
1 to 6 credit hours Assignment by department or chair of candidate's committee. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. S/U grading

HHP 7700 - Advanced Data Analysis and Organization for Human Performance
3 credit hours Prerequisites: HHP 6610 and HHP 6700 or equivalent. Skills and understanding necessary to read, conduct, report, and interpret advanced data analytical techniques using data from HHP. Practical and written assignments, presentations, examinations, and projects will furnish doctoral student with tools necessary for data analysis associated with dissertation requirement.

HHP 7710 - Experimental Design in Human Performance
3 credit hours Prerequisites: HHP 6610 and HHP 7700 or equivalent. Skills and understanding necessary to evaluate designs used in HHP research literature. Practical and written assignments, evaluation of current research, examinations, and projects; knowledge and skills for planning appropriately the design for future research projects.

HHP 7720 - Advanced Research Methods in Health and Human Performance
3 credit hours Examines the types of research methods, designs, and procedures that are required to conduct scholarly research in health and human performance. Students will read, interpret, and critique scientific research articles that are published in scholarly journals, and improve their skills in conducting and reporting their research in written and oral form.

HHP 7740 - Meta-Analysis in Human Performance
3 credit hours Designed to provide students with the theory and application of meta-analysis for quantitative analysis and review of scientific literature. the conceptual and statistical bases of meta-analysis are reviewed, selected meta-analysis articles are critiqued, and basic skills of meta-analysis are applied. Students will be required to conduct and report a meta-analysis in areas of interest to students.

HHP 7999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

HLTH 5360 - Teaching Human Sexuality
3 credit hours Assists individuals in developing, implementing, and evaluating human sexuality curricula and programs for schools (K-12) and other educational venues.

Leisure and Sports Management

LSM 5120 - Community Development through Leisure, Sport, and Tourism
3 credit hours Explores and utilizes sustainable practices to assess, develop, implement, and evaluate tourism's potential contribution to, or detraction from, the quality of life for communities through existing systematic approaches utilizing community development and evaluative frameworks.

Examines economic, environmental, socio-cultural, and political impacts on community tourism development within the community tourism development context.

LSM 5130 - Sport Tourism
3 credit hours The global sport tourism industry in post-modern society is a complex and interdependent niche sector best understood through an interdisciplinary approach. This course aims to familiarize students with the industry through exploration of sport in global society, sport event planning/execution/evaluation, spectatorship, the economic and political sport tourism landscape, and policy impacting, and impacted by sport tourism

LSM 5140 - Wine Tourism
3 credit hours Familiarizes students with how wine and tourism industry diverge, and indeed converge, across a range of economic, technical, cultural, geographic, and vocational factors.

LSM 5340 - Fitness Education for the Adult
3 credit hours (Same as HLTH 5340 and PHED 5340.) Planning, teaching, and participating in individual and group fitness programs for the adult. Administers and interprets assessments of related components with an understanding of physiological principles related to exercise in the adult. Major lifetime wellness activities covered.

LSM 5380 - Disabilities and Diversity in Leisure, Sport and Tourism
3 credit hours Important issues such as advocacy, accessibility, legalities, and the importance of and broad range of opportunities in the provision of recreational services for persons with disability in our society. For LSM majors only.

LSM 5470 - Leisure and Aging
3 credit hours Aging relative to the individual, family, peers, and society with an emphasis on leisure. The holistic approach including physical, psychological, social, cultural, environmental, and cognitive aspects explored. Interdisciplinary approach ideal for the developing or practicing human service professional.

LSM 5480 - Recreational Therapy Techniques
3 credit hours Activity-based therapeutic interventions currently utilized to alleviate existing health-related problems, maintain current level of functioning, or to assist in overall rehabilitation efforts of transdisciplinary treatment team.

LSM 5490 - Campus Recreation
3 credit hours For those wishing to acquire a specific and comprehensive knowledge of the recreational sports program and an understanding of its place and value in education and society.

LSM 5499 - Therapeutic Terminology in Recreational Therapy
3 credit hours Offers preparation for establishing a vital knowledge base necessary to work in today's fast changing rehabilitation settings. Terminology related to third-party reimbursement, accreditation of health care organizations, and basic medical abbreviations used in charting.

LSM 5500 - Introduction to Recreational Therapy
3 credit hours Prerequisite: LSTS 3010. Explores the profession of recreational therapy, the wide range of disabilities, and the role of intervention in a variety of settings: clinical, community, and transitional. Topics include history, philosophy, professional development/certification, systemic program design, and implementation.

LSM 5510 - Recreational Therapy in Clinical Settings
3 credit hours Prerequisites: LSTS 3010 and LSTS 4500. Increases understating of recreational therapy in clinical settings working with persons with health-related issues and/or disabilities. Concepts of disease and disability, holistic approach, interdisciplinary treatment, assessment, intervention planning and implementation, evaluation, documentation, and third-party reimbursement explored.

LSM 5520 - Transitional and Community Recreational Therapy
3 credit hours Issues clients may face when leaving institutions and returning to their communities. Examines the role and provision of recreational therapy services in transitional and community-based settings.

LSM 5540 - Organization and Administration of Leisure, Sport, and Tourism
3 credit hours Duties and responsibilities of an administrator and how these are performed. For LSM majors only.

LSM 5560 - Field Studies in Leisure, Sports, and Tourism
3 credit hours Prerequisite: LSTS 3530. Opportunity for supervised practical application of classroom theory in professional field work.

LSM 5570 - Outdoor Recreation Workshop
3 credit hours Off-campus course that provides materials and experiences not available in the classroom. exposure to issues, trends, and concerns relevant to outdoor recreation, resource management, and the delivery of programs and services in outdoor environments. Public, private non-profits, and commercial agencies experienced through a series of field trips, lectures, group exercises, and other experiential-based activities.

LSM 5580 - Seminar: Outdoor Recreation and Environmental Issues
3 credit hours Awareness of the importance of environmental considerations when planning, managing, or administering outdoor recreation programs. Includes environmental issues and methods of seeking solutions to environmental problems.

LSM 5590 - Readings in Leisure, Sport, and Tourism
3 credit hours In-depth reading and preparation of an annotated bibliography and report. Arrangements for this course should be made with the instructor prior to registration.

LSM 5660 - Evaluation of Leisure, Sport, and Tourism
3 credit hours Research and evaluation procedures and techniques applicable to assessing recreation and leisure service programs, participants, administrative structures, and resources. Emphasis on beginning and completing a "real-world" evaluation project.

LSM 5700 - Challenge Course Facilitation
3 credit hours A systematic approach to the fundamentals of group management in an experiential ropes course setting. Focuses on both interpersonal and technical facilitation skills. Several on and off-campus experiential, demonstration, and practical application sessions well be required.

LSM 5790 - Sport and Society
3 credit hours (Same as SOC 5790.) A behavioral approach to the sport and leisure phenomena from the related perspectives of sociology and anthropology.

LSM 5965 - Aquatic Exercise and Therapeutic Techniques
3 credit hours (Same as ATHT 5965 and EXSC 5965.) Examines the various uses of the aquatic environment to develop, maintain, and improve physical performance with practical development of skills and techniques and aquatic exercise programming. Combines both didactic and laboratory activities in an experiential learning environment.

LSM 6020 - Systems Thinking and Learning in Leisure and Sport Management
3 credit hours Focuses on organizational theory within leisure and sport management settings including knowledge and appreciation of how organizations function as a system and the role of the supervisor and administrator within each setting. Populations and settings examined include recreation/intramural managers, sport managers, and similar positions.

LSM 6500 - Legal Issues and Risk Management in Sport and Leisure Services
3 credit hours Understanding the legal basis for management actions, concepts of legal liability including torts, contracts, and constitutional law as applied to sport and leisure services organizations. Emphasis on the ability to plan, develop, and implement risk management programs.

LSM 6520 - Management Practices in Recreation and Leisure Services
3 credit hours Administrative processes and management techniques used in planning, organizing, staffing, directing, and controlling with respect to leisure service delivery systems.

LSM 6530 - History and Philosophy of Leisure and Sport
3 credit hours In-depth study of history and philosophy as related to leisure and sport in society. Emphasis on tracing the historical and philosophical underpinnings of the profession and their impact on current research and practice.

LSM 6550 - Outdoor Environmental Education
3 credit hours Camping leadership and outdoor education principles with implications for management, planning of, and interpretation in recreation areas as well as for policy development.

LSM 6570 - Issues, Trends, and Research in Leisure and Sport
3 credit hours Identification and analysis. Emphasis on meaningful, outstanding studies and research in the field of leisure and sport..

LSM 6640 - Thesis Research
1 to 6 credit hours (Same as EXSC 6640/HLTH 6640/PHED 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

LSM 6670 - Behavioral Concepts in Leisure and Sport
3 credit hours Social/psychological concepts concerning leisure and sport participation behavior in various types of leisure and sport settings. Range of different theoretical perspectives and behavioral concepts underlying pertinent research.

LSM 6710 - The Sport Industry
3 credit hours Overview of career paths in the sport industry with a focus on philosophical foundations, management theory, business communications, and marketing integration in the performance, promotion, and production segments of the sports industry.

LSM 6720 - Event Planning, Promotion, and Fundraising in Leisure and Sport
3 credit hours In-depth synthesis of marketing practices in leisure and sport including general marketing theory; pricing, distribution, and promotional techniques; media relations; and branding and sponsorship theory.

LSM 6730 - Socio-Cultural and Ethical Issues in Leisure and Sport
3 credit hours Sociocultural basis of sport and consideration of ethical issues that provide a foundation for the development of sound judgment by sport professionals.

LSM 6740 - Sport in Film and Fiction
3 credit hours Examines sport themes expressed in films, fiction, and poetry, with special emphasis on themes that can be compared with real sport experiences. Themes include sport heroes; youth and aging in sport, sport in the country and the city; nationalism, racism, and sexism in sport; the individual versus the community in sport; and humor and poetry in sport.

LSM 6850 - Cross-Cultural Perspectives in Leisure and Tourism
3 credit hours In-depth study of the leisure experience in other cultures (non-U.S.) through on-site observation; visits to cultural/historic sites; and interactions with managers and staff at parks, museums, attractions, and world heritage sites.

LSM 6880 - Internship/Special Project
3 to 6 credit hours (Same as EXSC 6880 / HLTH 6880 / PHED 6880.) On-site practical experience in an exercise science, health promotion, or leisure/sport industry program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

LSM 6910 - Special Problems
1 to 3 credit hours (Same as EXSC 6910 / HLTH 6910 / PHED 6910.) Individual study of current problems or areas of interest. S/U grading.

LSM 7020 - Systems Thinking and Learning in Leisure and Sport Management
3 credit hours Focuses on organization theory within leisure sport management settings including knowledge and appreciation of how organizations function as a system and the role of the supervisor and administrator within each setting. Populations and setting examined include recreation/intramural managers, sport managers, and similar positions.

LSM 7500 - Legal Issues and Risk Management in Sport and Leisure Services
3 credit hours Understanding the legal basis for management actions, concepts of legal liability including torts, contracts, and constitutional law as applied to sport and leisure services organizations. Emphasis on the ability to plan, develop, and implement risk management programs.

LSM 7530 - History and Philosophy of Leisure and Sport
3 credit hours In-depth study of history and philosophy as related to leisure and sport in society. Emphasis on tracing the historical and philosophical underpinnings of the profession and their impact on current research and practice.

LSM 7570 - Issues, Trends, and Research in Leisure and Sport
3 credit hours Seminar that identifies and analyzes outstanding research trends in recreation, leisure, and sport.

LSM 7670 - Behavioral Concepts in Leisure and Sport
3 credit hours Sociocultural basis of leisure and sport. Consideration of ethical issues that provide a foundation for the development of sound judgment by leisure and sport professionals.

LSM 7730 - Socio-Cultural and Ethical Issues in Leisure and Sport
3 credit hours Sociocultural basis of and sport and consideration of ethical issues that provide a foundation for the development of sound judgment by sport professionals.

LSM 7740 - Sport in Film and Fiction
3 credit hours Examines sport themes expressed in films, fiction, and poetry, with special emphasis on themes that can be compared with real sport experiences. Themes include sport heroes; youth and aging in sport; sport in the country and the city; nationalism, racism, and sexism in sport; the individual versus the community in sport; and humor and poetry in sport.

Physical Education

PHED 5340 - Fitness Education for the Adult
3 credit hours (Same as HLTH 5340.) Planning, teaching, and participating in individual and group fitness programs for the adult. Administers and interprets assessments of related components with an understanding of physiological principles related to exercise in the adult. Major lifetime wellness activities covered.

PHED 5600 - Technology Applications
1 credit hours (Same as HLTH 5450/REC 5600.) Prerequisite: Introductory course in computer literacy or equivalent with instructor permission. Corequisite: PHED 5601. Focus on understanding of and competency in use of a variety of technology applications related to the profession. Students will be required to enroll in the corresponding lab during the same semester.

PHED 5601 - Technology Applications Lab
2 credit hours (Same as HLTH 5451/REC 5601.) Corequisite: PHED 5600. Investigation and application of profession-specific software and hardware applications.

PHED 5700 - Content Development in Physical Education
3 credit hours Skill development, concepts and tactics of multiple games, gymnastics, and dance forms spanning the K-12 educational context constructed and delivered. Insights into planning and assessment of instruction highlighted.

PHED 5810 - Directing Intramural
2 credit hours The organization and administration of intramural programs. Actual participation in developing and supervising intramural activities.

PHED 5910 - Applied Kinesiology and Biomechanics
3 credit hours The science of human motion. Emphasis on principles of anatomy, physiology, and mechanics of human activity.

PHED 6000 - Adapted Physical Activity
3 credit hours Identifies current topics and procedures for testing and programming as well as current research findings and practices to assist students in developing necessary skills to design and implement appropriate physical activity for individuals with disabilities.

PHED 6090 - Motor Learning in Physical Education
3 credit hours Theories of learning related to the acquisition of motor skills; a review of the literature pertaining to motor skill development and the implications for teaching.

PHED 6640 - Thesis Research
1 to 6 credit hours (Same as EXSC 6640/HLTH 6640/LSM 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

PHED 6680 - Current Issues in Physical Education Pedagogy
3 credit hours Examines current issues in contemporary physical education pedagogy with an

emphasis on teaching P-16 physical education. Particular attention given to professional issues for practitioners teaching physical education in the public schools and trends in current professional literature.

PHED 6800 - Program Planning in Physical Education
3 credit hours Modern programs of physical education for all grade levels and the contribution of activities to the goals of education.

PHED 6801 - Advanced Sport and Exercise Psychology
3 credit hours Examines the psychological factors that explain high quality performance in sport and exercise. Sample topics include motivation, coaching psychology, the use of mental skills, communication strategies, and factors that affect participation and adherence to exercise.

PHED 6820 - Administration and Supervision of Physical Education and Sport
3 credit hours The organization, planning, and functions involved in administering and supervising programs of physical education and sport. Clinical or field experience required of students with a sport management concentration.

PHED 6880 - Internship and Special Projects
3 to 6 credit hours (Same as EXSC 6880/HLTH 6880/LSM 6880.) On-site practical experience in an exercise science, health promotion, or sport management program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

PHED 6910 - Special Problems
1 to 3 credit hours (Same as EXSC 6910/HLTH 6910/LSM 6910.) Individual study of current problems or areas of interest. S/U grading.

PHED 6920 - Analysis of Teaching Physical Education
3 credit hours Prerequisite: At least one year teaching experience in a physical activity setting or permission of instructor. Explores systematic and informal observation techniques for identifying and analyzing teacher and student behaviors occurring in physical activity settings.

PHED 6940 - Supervision of Teaching in Physical Education
3 credit hours Theoretical and clinical approaches to instructional supervision in physical activity settings.

PHED 7000 - Adapted Physical Activity
3 credit hours Cognitive, neuromuscular, sensory, and orthopedic impairments; identification of current topics and procedures for testing and programming for individuals with disabilities; current research findings and practices to assist students in developing necessary skills to design and implement appropriate physical activity programs for individuals with disabilities.

PHED 7010 - Analysis and Criticism of Professional Literature
3 credit hours Thorough consideration of selected specialized literature most likely to influence physical education programs, procedures, and practices in the school and community.

PHED 7040 - History of Physical Education
3 credit hours The role of physical activity in the lives of people from antiquity to the present with an emphasis on the major events, movements, and people that have influenced the development of physical education.

PHED 7090 - Motor Learning in Physical Education
3 credit hours Theories of learning related to the acquisition of motor skills; a review of the literature pertaining to motor skill development and the implications for teaching.

PHED 7680 - Current Issues in Physical Education Pedagogy
3 credit hours Examines current issues in contemporary physical education pedagogy with an emphasis on teaching P-16 physical education. Particular attention given to professional issues for practitioners teaching physical education in the public schools and trends in current professional literature.

PHED 7920 - Analysis of Teaching Physical Education
3 credit hours Prerequisite: At least one year teaching experience in a physical activity setting or permission of instructor. Explores systematic and informal observation techniques for identifying and analyzing teacher and student behaviors occurring in physical activity settings.

PHED 7940 - Supervision of Teaching in Physical Education
3 credit hours Theoretical and clinical approaches to instructional supervision in physical activity settings.

Recreation

REC 5600 - Technology Applications
1 credit hours (Same as HLTH 5451 and PHED 5600.) Prerequisite: Introductory course in computer literacy or equivalent with instructor permission. Corequisite: REC 5601. Focus on understanding of and competency in use of a variety of technology applications related to the profession. Students required to enroll in the corresponding lab during the same semester.

REC 5601 - Technology Applications Lab
2 credit hours (Same as HLTH 5451 and PHED 5601.) Corequisite: REC 5600. Investigation and application of profession-specific software and hardware applications.

Safety

SAFE 5320 - Principles of Accident Control
3 credit hours Principles, concepts, and methodology of the safety movement. Introductory experiences dealing with accident prevention as well as control efforts recommended by various social institutions and agencies reviewed.

SAFE 5350 - Automotive Transportation Safety Programs
3 credit hours Federal, state, and local legislation concerning transportation control and design.

SAFE 5850 - Driver and Traffic Safety Fundamentals
3 credit hours Prerequisite: Valid driver's license. Introduction to the field of driver and traffic safety education. Primary focus is on current concepts related to safe driving.

SAFE 5870 - Teaching Driver and Traffic Safety
3 credit hours Prerequisite: SAFE 4850 or SAFE 5850. Designed to develop teaching techniques for laboratory instruction including on-street, driving simulator, and multiple-car range programs.

SAFE 6410 - Administration and Supervision of Safety Programs in Schools and Colleges
3 credit hours An overview of the total program administration through analysis of tasks, strategies, and situational factors affecting them; examines handicaps to safety programming, needed change, and methods for implementation.

SAFE 6450 - Field Practice in Safety Education
3 credit hours Professional assignment under supervision of one or more safety educators or agency directors in school or community organizations.

SAFE 6470 - Disaster Preparedness and Emergency Care Systems
3 credit hours Major elements involved in disasters and emergencies, preparedness planning, systems utilization, and attention to essential human services, with emphasis on community action.

SAFE 6920 - School Safety and Safety Education
3 credit hours School safety education concepts in all disciplines and levels, including content, methodology, and teacher liability.

Tourism and Hospitality Management

THM 5110 - Tourism and Hospitality Planning and Development
3 credit hours Explores various dimensions of the role tourism plays in community and regional development. Discusses the theories and practices regarding tourism supply and demand, economic impact, tourism structure and policy, environmental and social considerations, travel and tourism research, and marketing. Specific attention given to sustainability of the community and industry and the examination of the dynamics between social or economic development and the quality of life for the residents.

THM 5200 - Principles of Lodging and Food and Beverage
3 credit hours In-depth examination of the principles, theories, and practices related to lodging and food and beverage (F&B) business operation. Covers managerial practice, marketing, human resources, budgeting, and career components of hotel/lodging, resorts, restaurants, catering, and food and beverage services in the hospitality industry.

THM 5210 - Service Design and Delivery in Tourism and Hospitality Management
3 credit hours Introduces a myriad of concerns, issues, and objectives found when managing service operations in the tourism and hospitality industry and provides a look into the decision-making process for improved organization operations. Reviews designing and delivering service to internal and external customers through basic principles of service management, service environment, and interactions.

THM 5220 - International Tourism
3 credit hours Examines international travel and tourism issues and trends, travel challenges, demand, popular destinations, safety, and international travel and tourism organizations. Utilizes current international tourism statistics to identify and analyze current industry trends. Focus on current and future trends in global travel; evaluation of the barriers to future development and expansion; and examination of the global impact of travel, tourism and hospitality services.

THM 5300 - Issues and Trends in Tourism and Hospitality Management
3 credit hours Prerequisites: THM 3100, THM 4110, and THM 4210. Examines current critical issues facing the hospitality and tourism industry. Through examination, students will assess the implications and impacts of these trends and issues as well as develop an understanding for how to manage, utilize, mitigate, and develop their outcomes.

THM 5400 - Strategic Decision Making in Tourism and Hospitality Management
3 credit hours Focuses on understanding and analyzing managerial decisions and actions that determine and influence the long-run direction and performance of an organization through looking at objectives, developing appropriate plans, and finding and allocating resources.

Human Sciences

Gina Pisut, Chair
(615) 898-2884
www.mtsu.edu/humansciences/
The Human Sciences Department offers a graduate-level minor and a Leadership in Nutrition concentration through the Professional Studies program.

Human Sciences Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Child Development Family Services

CDFS 5140 - Violence in the Family
3 credit hours (Same as SOC 5140.) Prerequisite: CDFS 3320 or SOC 2500. Causes, dynamics, and consequences of violence in the family. Includes the discussion of violence toward children, spouses, dating partners, siblings, and elders. Emphasizes the social conditions that lead to these types of violence.

CDFS 5340 - The Contemporary Family
3 credit hours Prerequisite: CDFS 3320 or permission of department. An ecological approach to the study of contemporary issues, problems, questions, and lifestyles as they relate to families and individuals.

CDFS 5350 - Parenting
3 credit hours credit hours Prerequisites: CDFS 3320 or CDFS 3310 or PSY 4190 or permission of department. Knowledge of parenting and parent/child interactions and the role of the parent educator from various theoretical and applied perspectives.

CDFS 5390 - Families in Later Life
3 credit hours Prerequisite: Human Sciences majors - CDFS 3310, CDFS 3320, or PSY 4190; Sociology majors - SOC 2600; or permission of department. Examines families in later life from an ecological approach with emphasis on family forms and relationships.

CDFS 5391 - Aging Health and Development
3 credit hours Prerequisite: CDFS 4390 or SOC 2600 or permission of department. A service learning opportunity that seeks to provide students with understanding of the concepts and application of aging, families in later life, assessment, and gerontological program planning and implementation.

CDFS 6300 - Application of Child Development Principles I
3 credit hours A comprehensive exploration of human growth and development from conception to age six. Recognizing and assessing developmental ages and stages as well as special needs is an integral part of this course.

CDFS 6310 - Application of Child Development Principles II
3 credit hours Prerequisite: CDFS 6300 or equivalent. Advanced study of the child from the age of six through adolescence from a holistic perspective.

CDFS 6320 - Families at Risk
3 credit hours Prerequisite: CDFS 3320 or permission of the instructor. The dynamics, context, and overall impact of factors which place families at risk. Methods by which family members cope with normative and/or catastrophic stressor events analyzed from a variety of theoretical perspectives.

CDFS 6330 - Theories of Child Development and Family Relations
3 credit hours The advanced study of individual and family theory, as well as theory principles and evaluation criteria.

Family and Consumer Sciences

FCSE 5500 - Occupational Field Experience
3 to 9 credit hours Prerequisite: Permission of department. Directed participation in planned and supervised occupational experiences of eight hours field experience per week. Must apply previous semester.

FCSE 5501 - Occupational Field Experience: Care and Guidance of Children
3 to 9 credit hours Prerequisite: Permission of department. Directed participation in planned and supervised occupational experiences of eight hours field experience per week. Must apply previous semester.

FCSE 5502 - Occupational Field Experience: Food Management, Production, and Services
3 to 9 credit hours Prerequisite: Permission of department. Directed participation in planned and supervised occupational experiences of eight hours field experience per week. Must apply previous semester.

FCSE 5540 - Teaching Family and Consumer Sciences Education
1 to 6 credit hours Synthesis and application of relevant concepts relating to educational planning; changes relating to the development of effective family and consumer sciences education programs. A maximum of six semester hours credit may be applied toward a degree.

FCSE 5550 - Curriculum Development
3 credit hours Review of recent advances in family and consumer sciences education. Analysis and evaluation of selected topics, materials, and methods in terms of their appropriateness for reaching curriculum objectives in family and consumer sciences education..

FCSE 5560 - Problems in Teaching Materials
1 to 3 credit hours Prerequisite: Permission of department. Application of principles and techniques involved in the selection and preparation of effective teaching materials and visual aids.

FCSE 5570 - Occupational Family and Consumer Sciences Seminar
3 credit hours Prerequisite: Permission of department. Examination and analysis of program development, execution, and evaluation in a selected occupational area.

Human Sciences

HSC 5040 - Seminar in Human Sciences
3 credit hours Prerequisite: Permission of department. Individual research and/or analysis of contemporary problems and issues in a concentrated area of study. For advanced students. May be repeated for up to 9 hours.

HSC 5041 - Seminar in Human Sciences: Child Development and Family Studies
3 credit hours Prerequisite: Permission of department. Individual research and/or analysis of contemporary problems and issues in a concentrated area of study. For advanced students. May be repeated for up to 9 hours.

HSC 5042 - Seminar in Human Sciences: Nutrition and Food Science
3 credit hours Prerequisite: Permission of department. Individual research and/or analysis of contemporary problems and issues in a concentrated area of study. For advanced students. May be repeated for up to 9 hours.

HSC 5043 - Seminar in Human Sciences: Textiles, Merchandising, and Design
3 credit hours Prerequisite: Permission of department. Individual research and/or analysis of contemporary problems and issues in a concentrated area of study. For advanced students. May be repeated for up to 9 hours.

HSC 5044 - Seminar in Human Sciences: Interior Design
3 credit hours Prerequisite: Permission of department. Individual research and/or analysis of contemporary problems and issues in a concentrated area of study. For advanced students. May be repeated for up to 9 hours.

HSC 5050 - Advanced Problems in Human Sciences
3 credit hours Prerequisite: Permission of department. Provides an opportunity for advanced students to do independent study or conduct research in their areas of concentration. Topics of study or research to be determined by student and professor prior to registration. May be repeated for up to 9 hours.

HSC 5051 - Advanced Problems in Human Sciences: Child Development and Family Studies
3 credit hours Prerequisite: Permission of department. Provides an opportunity for advanced students to do independent study or conduct research in their areas of concentration. Topics of study or research to be determined by student and professor prior to registration. May be repeated for up to 9 hours.

HSC 5052 - Advanced Problems in Human Sciences: Nutrition and Food Science
3 credit hours Prerequisite: Permission of department. Provides an opportunity for advanced students to do independent study or conduct research in their areas of concentration. Topics of study or research to be determined by student and professor prior to registration. May be repeated for up to 9 hours.

HSC 5053 - Advanced Problems in Human Sciences: Textiles, Merchandising, and Design
3 credit hours Prerequisite: Permission of department. Provides an opportunity for advanced students to do independent study or conduct research in their areas of concentration. Topics of study or research to be determined by student and professor prior to registration. May be repeated for up to 9 hours.

HSC 5054 - Advanced Problems in Human Sciences: Interior Design
3 credit hours Prerequisite: Permission of department. Provides an opportunity for advanced students to do independent study or conduct research

in their areas of concentration. Topics of study or research to be determined by student and professor prior to registration. May be repeated for up to 9 hours.

HSC 5060 - Readings in Human Sciences
1 to 3 credit hours Prerequisite: Permission of department. Selected readings of current trends, developments, and research in human sciences of interest to teachers and students.

HSC 5061 - Readings in Human Sciences
1 to 3 credit hours Prerequisite: Permission of department. Selected readings of current trends, developments, and research in human sciences of interest to teachers and students.

HSC 5410 - Consumer Economics
3 credit hours Study of the economic system and factors influencing consumer decisions and the marketplace; identifies social, economic, and political forces shaping consumer demands; and analyzes the influence of customs, trends, peer groups, and advertising.

HSC 5420 - Personal and Family Management
3 credit hours Examines management functions. Emphasis on management roles and responsibilities of human sciences professionals, the relationship of the learning organization concept to the human sciences profession, and the use of quality improvement techniques to solve problems encountered by professionals.

HSC 5430 - Resource Management
3 credit hours Opportunity to identify and integrate the management functions of the human sciences areas. Emphasis on management roles and responsibilities of human sciences professionals, the relationship of the learning organization concept to the human science profession, and the use of quality improvement techniques to solve human sciences-related problems.

HSC 5450 - Professionalism in Consumer Services
3 credit hours The roles, functions, and responsibilities of consumer services professionals employed in business, government, and other organizations.

HSC 6100 - Teaching Personal Finance
3 credit hours Personal Finance methods and materials for middle and high school teachers. On-campus one week summer institute with emphasis on college access and success, active learning tools, content, and application plus demonstrated completion of an MTSU approved financial literacy workshop.

HSC 6500 - Issues and Trends in Human Sciences
1 to 3 credit hours An in-depth analysis of one or more current issues or trends in human sciences. Topics will vary.

HSC 6520 - Public Policy on Consumer and Family Issues
3 credit hours The ideological roots, impact, and effectiveness of family policy. Family well-being in the areas of health, child care, care of the elderly and disabled, and poverty examined in relation to the development of public policy.

HSC 6530 - Effective Program Management
3 credit hours Addresses the knowledge and skills required for developing, implementing, managing, and evaluating programs to meet the needs of for-profit and nonprofit organizations. In addition, it covers the aspects of writing grant proposals to support those programs.

HSC 6620 - Research Methods in Human Sciences
3 credit hours Introduction to methods and tools of research. Selection and statement of research problems, formulation of research proposal.

HSC 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

Interior Design

IDES 5700 - History of Interiors
3 credit hours Prerequisite: Junior standing. Historic interiors: survey, analysis, and applications. Emphasis on major design characteristics of interior architectural and furnishing styles.

IDES 5710 - Survey of Contemporary Interior Design
3 credit hours Prerequisite: IDES 4700 or IDES 5700. Survey of the development of contemporary interiors from the nineteenth century to the present with consideration given to style characteristics, cultural influences, designers, and relationships among styles.

Nutrition and Food Science

NFS 5100 - Food Service Management for Culinary Arts
3 credit hours Explores the management process of the food service industry. Areas of study include food and beverage operations, facility design, food service marketing, menu planning, and nutritional concerns.

NFS 5200 - Diet and Disease
3 credit hours Prerequisites: BIOL 2020/2021, NFS 4271. Nutritional problems in disease and modifications of normal diet to meet dietary requirements of pathological conditions. Offered once a year.

NFS 5210 - Nutrition in Aging
3 credit hours Prerequisite: NFS 1240 or 2220. Nutritional needs of elderly individuals and how these requirements are affected by physiological, pathological, and socioeconomic changes associated with aging. Emphasis on assessment, nutrition counseling skills, and resources to assist elderly individuals with adequate nutrient intake.

NFS 5220 - Food Systems Management
3 credit hours Prerequisite: NFS 3200 with B or better. Corequisite: NFS 5221. Emphasis on food systems model, food safety and sanitation, menu planning, procurement, quality food production, distribution and service. flow of food, and foodservice equipment. Combination of lecture and field placement. Six hours per week.

NFS 5221 - Food Systems Management Lab
0 credit hours Corequisite: NFS 5220

NFS 5222 - Nutrition and Food Service Management
3 credit hours Prerequisite: HSC 4430. Principles and responsibilities of food and nutrition professionals. Emphasis on marketing food and nutrition services, financial management, facilities planning and design, human resources management, work improvement, and productivity. Offered spring only.

NFS 5240 - Experimental Food Study
3 credit hours Prerequisites: NFS 3200 and CHEM 2030/2031 or permission of department. Chemical and physical factors affecting the flavor, texture, color, and appearance of food. Emphasis on evaluation of sensory qualities of food using subjective and objective measurements and new food product development. Offered once per year.

NFS 5250 - Life Cycle Nutrition
3 credit hours Physiological development and psychosocial factors that influence nutrient needs and nutrition behaviors of individuals across the life span. Emphasis is place on rules and regulations of food and nutrition programs and nutrition education approaches for the life stages.

NFS 5260 - Food Safety Issues from Production to Consumption
3 credit hours Issues that impact food production, food storage and transportation, food processing, and food consumption within food production facilities, the home, and food service facilities. Consumer concerns evaluated based on risk theory and scientific evaluation of safety, including decision-making through critical thinking. Food standards and regulations designed to improve safety of food also discussed.

NFS 5270 - Advanced Nutrition
3 credit hours Prerequisites: NFS 2220, BIOL 2010/2011, and BIOL 2020/2021 (with a C or better). Advanced study of nutrients, standards for determination of nutrient needs and metabolism of nutrients in the body. ***Offered Fall only***.

NFS 5400 - Dietetic Practicum
6 credit hours Prerequisites: NFS 5200 and NFS 5220. Practical preparation in clinical dietetics. Clinical experience provided with the cooperation of Middle Tennessee Medical Center and other facilities. For dietetics students only. **Offered Summer only.**

NFS 5800 - Diet and Disease Seminar
1 credit hours To be taken concurrently with NFS 5200. Nutrition and Food Science majors only. Practice in applying the knowledge base acquired in NFS 5200 to structured case studies and development of the critical thinking skills needed to

design accurate and systematic nutrition care plans in the clinical setting.

NFS 6100 - Advanced Studies in Food and Culture
3 credit hours Comprehensive investigation of the roles that culture plays in food practices, beliefs, and health of Native Americans, Europeans, Africans, Mexicans and Central Americans, Islanders, Asians, Middle Easterner, and other groups.

NFS 6200 - Current Issues in Macronutrients
3 credit hours Prerequisite: CHEM 3530/3531 or permission of instructor. Current issues and controversies in carbohydrates, lipids, and proteins with emphasis on metabolic aspects related to health promotion and disease prevention.

NFS 6210 - Current Issues in Micronutrients
3 credit hours Prerequisite: CHEM 3530/3531 or permission of instructor. Current topics in vitamin and mineral metabolism with emphasis on the physiological requirements, assessment techniques, and roles in health promotion and disease prevention.

NFS 6220 - Food Industry Applied Nutrition
3 credit hours Integration of food technological considerations, nutrition attributes, consumer perceptions, and socio-demographic influences to determine food choice, and thus diet quality.

NFS 6230 - Advanced Clinical Nutrition
3 credit hours Sequential to NFS 5200 and NFS 5270. Integration of the principles of basic biological diseases in the pathogenesis, diagnosis, and management of the nutritional aspects of disease including nutritional assessment and dietary implication in the etiology of disease.

NFS 6290 - Dietetic Internship
6 credit hours Planned educational experiences in administration of food service systems and experiences in a health care facility applying principles of normal and clinical nutrition to nutritional problems occurring throughout the life cycle.

NFS 6300 - Entrepreneurial Skills for Nutrition Professionals
3 credit hours Addresses the management tools, networking resources, and marketing principles necessary for nutrition professionals to be successful entrepreneurs. Available opportunities examined with a focus on the many non-traditional ways nutrition professionals can develop and build their businesses.

NFS 6400 - Current Issues in Sustainable Food Systems
3 credit hours Examines the current evidence and contemporary views addressing sustainability across the food system.

NFS 6600 - Nutrition and Obesity
3 credit hours Examines the context, prevalence, causes, consequences, and treatment of obesity and weight-related issues in the United States and other developed and developing societies. Topics focus on the nutrition-related physiological, psychological, sociological, economic, and political aspects of obesity.

NFS 7100 - Advanced Studies in Food and Culture
3 credit hours Comprehensive investigation of the roles that culture plays in food practices, beliefs, and health of Native Americans, Europeans, Africans, Mexicans and Central Americans, Islanders, Asians, Middle Easterner, and other groups.

NFS 7210 - Current Issues in Micronutrients
3 credit hours Current topics in vitamin and mineral metabolism with emphasis on the physiological requirements, assessment techniques, and roles in health promotion and disease prevention.

NFS 7600 - Nutrition and Obesity
3 credit hours Examines the context, prevalence, causes, consequences, and treatment of obesity and weight-related issues in the United States and other developed and developing societies. Topics focus on the nutrition-related physiological, psychological, sociological, economic, and political aspects of obesity.

Textiles, Merchandising, and Design

TXMD 5130 - History of Costume
3 credit hours Survey of clothing and design from ancient to modern times; consideration given to social, economic, and cultural conditions reflected in dress.

TXMD 5170 - Social Aspects of Clothing
3 credit hours Principles of sociology and psychology applied to the study of clothing behavior. Research methods for studying sociopsychological aspects of clothing included. Offered once a year.

Nursing

Jenny Sauls, Director
(615) 898-2437
MSNadvisor@mtsu.edu
The School of Nursing offers the Master of Science in Nursing (M.S.N.) with concentrations in Advanced Practice: Family Nurse Practitioner and Psychiatric Mental Health. A Psychiatric Mental Health Nurse Practitioner Certificate is also offered.

Nursing, Advanced Practice: Family Nurse Practitioner (FNP), M.S.N.

Jenny Sauls, Director
(615) 904-8488
MSNadvisor@mtsu.edu
Academic Advisor for MSN Program
(615) 898-5252
MSNadvisor@mtsu.edu
Courses are offered each semester (Fall, Spring, and Summer). All courses are taught in the online learning environment.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Nursing with a concentration in Advanced Practice: Family Nurse Practitioner requires

1. residence in Tennessee;
2. an unencumbered license to practice as a Registered Nurse in Tennessee;
3. a bachelor's degree in nursing with an overall GPA of 3.0 on a 4.0 scale (conditional admission will be considered with a 2.9 overall B.S.N. GPA);
4. successful completion of a 3-semester-hour or 4-quarter-hour undergraduate level statistics course;
5. TOEFL (Test of English as a Foreign Language) if needed.

Application Procedures

Students are advised to contact the graduate program advisor in the School of Nursing before beginning the application procedure. Applications are due by October 1 for spring admission and April 1 for fall admission.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official copies of transcripts including all universities attended;
3. submit three signed letters of recommendation;
4. submit an updated vita or resume;
5. submit a copy of R.N. license.

Degree Requirements

The Master of Science in Nursing requires completion of a minimum of 42 semester hours.
Candidate must

1. complete graduate nursing courses with a B or better in all courses,
2. maintain current documentation within the School of Nursing document storage account, and
3. complete an Advanced Family NP practicum.

Reinstatement/Extension

Both full-time and part-time students must register for each term (fall, spring, and summer). Failure to register for any semester/term constitutes a lapse in the program of study requiring readmission to the program. See readmission requirements in the policy.

Students who do not plan to register for a particular term/semester must complete and submit an Interruption of Program (IOP) form to the MSN academic advisor before completing the current term. Failure to submit the IOP will result in the necessity for reapplication.
Note that students may wish to submit a Stop Out form to the College of Graduate Studies and will need to fill out a readmission application form (without being required to submit any additional materials) before enrolling for the next term/semester. This will ensure that the College of Graduate Studies has all current student information and will trigger the process required for re-enrollment.

Curriculum: Nursing, Advanced Practice: Family Nurse Practitioner

The following illustrates the coursework requirements.

Core (15 hours)

- NURS 6010 - Theory and Evidence-Based Practice **3 credit hours**
- NURS 6011 - Health Promotion and Disease Prevention Across the Life Span **3 credit hours**
- NURS 6012 - Diversity and Caring for Special Populations **3 credit hours**
- NURS 6013 - Ethics, Healthcare Policy, and Economics **3 credit hours**
- NURS 6014 - NP Role and Leadership in Health Care **3 credit hours**

Concentration Courses (10 hours)

- NURS 6110 - Advanced Health Assessment **4 credit hours**
- NURS 6111 - Advanced Pathophysiology **3 credit hours**
- NURS 6112 - Advanced Pharmacology **3 credit hours**

Family Nurse Practitioner Courses (12 hours)

- NURS 6210 - Family Healthcare Diagnosis and Management I **6 credit hours**
- NURS 6211 - Family Healthcare Diagnosis and Management II **6 credit hours**

Practicum (5 hours)

- NURS 6213 - Family Healthcare Diagnosis and Management Intensive **5 credit hours**

Withdrawal from a Course

Only two (2) instances of course withdrawal are permitted without consequences in the M.S.N. program. Withdrawal from one or more courses in any given semester is considered one (1) instance of withdrawal. Students with more than two (2) withdrawals from the M.S.N. program will not be readmitted to the program.

Nursing, Psychiatric Mental Health Nurse Practitioner (PMHNP), M.S.N.

Jenny Sauls, Director
(615) 904-8488
MSNAdvisor@mtsu.edu
Academic Advisor for MSN Program
(615)898-5252
MSNadvisor@mtsu.edu
Courses are offered each semester (Fall, Spring, and Summer). All courses are taught in the online learning environment.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Nursing with a concentration in Psychiatric Mental Health Nurse Practitioner requires

1. residence in Tennessee;
2. an unencumbered license to practice as a Registered Nurse in Tennessee;
3. a bachelor's degree in nursing with an overall GPA of 3.0 on a 4.0 scale (conditional admission will be considered with a 2.9 overall B.S.N. GPA);
4. successful completion of a 3-semester-hour or 4-quarter-hour undergraduate level statistics course.
5. TOEFL (Test of English as a Foreign Language) if needed.

Application Procedures

Students are advised to contact the graduate program advisor in the School of Nursing before beginning the application procedure. Applications are due by October 1 for spring admission and April 1 for fall admission.
Applicant must

1. submit application with the appropriate fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official copies of transcripts including all universities attended;
3. submit three signed letters of recommendation;
4. submit an updated vita or resume;
5. submit a copy of R.N. license.

Degree Requirements

The Master of Science in Nursing requires completion of a minimum of 42 semester hours.
Candidate must

1. complete graduate nursing courses with a B or better in all courses;
2. maintain current documentation within the School of Nursing document storage account, and
3. complete a psychiatric mental health practicum.

Reinstatement/Extension

Both full-time and part-time students must register for each term (fall, spring, and summer). Failure to register for any semester/term constitutes a lapse in the program of study requiring readmission to the program. See readmission requirements in the policy.

Students who do not plan to register for a particular term/semester must complete and submit an Interruption of Program (IOP) form to the MSN academic advisor before completing the current term. Failure to submit the IOP will result in the necessity for reapplication.
Note that students may wish to submit a Stop Out form to the College of Graduate Studies and will need to fill out a readmission application form (without being required to submit any additional materials) before enrolling for the next term/semester. This will ensure that the College of Graduate Studies has all current student information and will trigger the process required for re-enrollment.

Curriculum: Nursing, Psychiatric Mental Health Nurse Practitioner

The following illustrates the coursework requirements.

Core (12 hours)

- NURS 6010 - Theory and Evidence-Based Practice **3 credit hours**
- NURS 6011 - Health Promotion and Disease Prevention Across the Life Span **3 credit hours**
- NURS 6013 - Ethics, Healthcare Policy, and Economics **3 credit hours**
- NURS 6014 - NP Role and Leadership in Health Care **3 credit hours**

Concentration (13 hours)

- NURS 6110 - Advanced Health Assessment **4 credit hours**
- NURS 6111 - Advanced Pathophysiology **3 credit hours**
- NURS 6112 - Advanced Pharmacology **3 credit hours**
- NURS 6310 - Psychopharmacology **3 credit hours**

Family Nurse Practitioner Courses (12 hours)

- NURS 6311 - Psychiatric Mental Health Diagnosis and Management I **6 credit hours**
- NURS 6312 - Psychiatric Mental Health Diagnosis and Management II **6 credit hours**

Practicum/Intensive (5 hours)

- NURS 6313 - Psychiatric Mental Health Diagnosis and Management Practicum **5 credit hours**

Withdrawal from a Course

Only two (2) instances of course withdrawal are permitted without consequences in the M.S.N. program. Withdrawal from one or more courses in any given semester is considered one (1) instance of withdrawal. Students with more than two (2) withdrawals from the M.S.N. program will not be readmitted to the program.

Psychiatric Mental Health Nurse Practitioner (PMHNP) Certificate

Jenny Sauls, Director
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MSNAdvisor@mtsu.edu
Academic Advisor for MSN Program
(615) 898-5252
MSNAdvisor@mtsu.edu
The certificate program in Psychiatric Mental Health Nurse Practitioner is designed to be delivered in a hybrid format and to meet the demand for psychiatric providers in the health care field.

Admission Requirements

Admission to the Psychiatric Mental Health Nurse Practitioner certificate program requires

1. residence in Tennessee;
2. an unencumbered license to practice as a Registered Nurse in Tennessee;
3. a bachelor's degree in nursing with an overall GPA of 3.0 on a 4.0 scale (conditional admission will be considered with a 2.9 overall B.S.N.GPA);
4. successful completion of a 3-semester-hour or 4-quarter-hour undergraduate level statistics course;
5. TOEFL (Test of English as a Foreign Language) if needed;
6. an earned Master of Science (MSN) degree in Nursing from an accredited college or university.

Application Procedures

Students are advised to contact the School of Nursing before beginning the application procedure. Applications are due by October 1 for spring admission and April 1 for fall admission.
Applicant must

1. submit application with the appropriate application fee (online at www.mtsu.edu/grad/apply.php);
2. submit official copies of transcripts including all universities attended;
3. submit three signed letters of recommendation;
4. submit an updated vita or resume;
5. submit a copy of R.N. license.

Certificate Requirements

The Certificate in Psychiatric Mental Health Nurse Practitioner requires completion of 20 hours.

Curriculum: Psychiatric Mental Health Nurse Practitioner

Concentration (3 hours)

- NURS 6310 - Psychopharmacology **3 credit hours**

Family Nurse Practitioner Courses (12 hours)

- NURS 6311 - Psychiatric Mental Health Diagnosis and Management I **6 credit hours**
- NURS 6312 - Psychiatric Mental Health Diagnosis and Management II **6 credit hours**

Practicum/Intensive (5 hours)

- NURS 6313 - Psychiatric Mental Health Diagnosis and Management Practicum **5 credit hours**

Program Notes

Students may be required to take other prerequisite courses as deemed necessary by the SON Admissions Committee and program coordinator.

Nursing

NURS 6001 - Healthcare Policy
3 credit hours Prerequisite: Admission to the MTSU MSN program. Designed to further knowledge in health care policy and how its use impacts the health care delivery system. Within this context students will read about and discuss aspects of health care delivery, access and equity of the health care system, health disparities and how they impact delivery and policy, and how advanced practice nursing can impact health policy. Intended for master level students in the health care arena. Offered spring, summer and fall semesters.

NURS 6002 - Advanced Nursing Research
3 credit hours Prerequisite or corequisite: NURS 6000 ; admission to the MTSU MSN program. Involves the systematic examination and application of the research process. Concept of evidenced-based practice and its application to nursing critically examined. Offered spring, summer, and fall semesters.

NURS 6003 - Advanced Role Development
3 credit hours Prerequisite: Admission into MTSU MSN program. Provides students with an in-depth understanding of the legal, historical, political, social, and ethical aspects of advanced nursing. Examines traditional and emerging roles for advanced nursing. Offered spring, summer and fall semesters.

NURS 6005 - Advanced Independent Health Care Study
1 to 3 credit hours Students pursue individual interests in the health care arena by contracting with an instructor and documenting the plan of learning as well as its fulfillment.

NURS 6010 - Theory and Evidence-Based Practice
3 credit hours Encourages nursing inquiry and scholarship by developing skills necessary for evidence-based practice and healthcare improvement. Focuses on the principles and processes of evidence-based practice and relationships between theory, research, quality improvement, and evidence-based practice.

NURS 6011 - Health Promotion and Disease Prevention Across the Life Span
3 credit hours Focuses on evidence-based guidelines used to promote health and prevent disease for diverse individuals, communities, and populations. Emphasis on health promotion, risk reduction, disease prevention, and disease detection.

NURS 6012 - Diversity and Caring for Special Populations
3 credit hours Focuses on identifying the needs of diverse and special populations across the lifespan. Content will include social determinants of health and care for individuals with unique healthcare needs.

NURS 6013 - Ethics, Healthcare Policy, and Economics
3 credit hours Focuses on ethical principles, healthcare policy, and economics and the influence of these topics on providers, consumers, and the healthcare system. Explores moral and ethical principles of healthcare and the relationship to healthcare policy.

NURS 6014 - NP Role and Leadership in Health Care
3 credit hours Requires analysis of the advanced practice nurse role and its relationship to various dimensions of leadership. Principles of leadership and accountability provide foundation for integrating concepts such as systems thinking, quality improvement, and fiscal responsibility.

NURS 6110 - Advanced Health Assessment
4 credit hours Acquisition and application of advanced health assessment skills and techniques to perform focused and comprehensive health assessments across the lifespan. Analysis and evaluation of physical assessment findings and development of diagnostic reasoning skills.

NURS 6111 - Advanced Pathophysiology
3 credit hours Focuses on application of pathophysiologic processes common in acute and chronic illnesses in primary care patients across the lifespan. Integrates theoretical knowledge and clinical principles from nursing and related disciplines to disease processes.

NURS 6112 - Advanced Pharmacology
3 credit hours Focuses on pharmacology and therapeutics used in the treatment of selected health conditions commonly encountered by the advanced practice nurse. Emphasis placed on the decision-making process utilized to safely and effectively prescribe and monitor pharmacotherapeutics appropriate to the client situation. Offered spring, summer, and fall semesters.

NURS 6210 - Family Healthcare Diagnosis and Management I
6 credit hours Focuses on advanced practice nursing diagnosis and management of healthcare problems common to individuals and families. Emphasis on core concepts of diagnosis and management of common acute and chronic conditions in primary care settings.

NURS 6211 - Family Healthcare Diagnosis and Management II
6 credit hours Focuses on the continuing development of the advanced practice nurse. Emphasis placed on increasing competency in the development and evaluation of comprehensive, collaborative, and evidence-based plans of care for complex and multisystem disorders.

NURS 6213 - Family Healthcare Diagnosis and Management Intensive
5 credit hours Final synthesis of advanced practice nursing. Comprehensive and emphasizes autonomous practice and the professional role and responsibilities of the entry-level family nurse practitioner. Students prepared for national certification and credentialing.

NURS 6310 - Psychopharmacology
3 credit hours Examines the indications, actions, and effects of psychotropic drugs in the management of targeted psychiatric symptoms and treatment of acute and chronic psychiatric disorders across the lifespan. Patient safety emphasized through appropriate prescribing.

NURS 6311 - Psychiatric Mental Health Diagnosis and Management I
6 credit hours Emphasizes concepts, techniques, and knowledge necessary to conduct accurate mental health assessments. Data collection, including the principles of general health screening, psychiatric history taking, mental status examination, diagnostic criteria from the DSM-5, and therapeutic interviewing utilized.

NURS 6312 - Psychiatric Mental Health Diagnosis and Management II
6 credit hours Focuses on deepening and expanding the knowledge of fundamental elements related to the development and maintenance of therapeutic relationships with clients in mental health settings. Emphasis placed on the application of theory to clinical practice.

NURS 6313 - Psychiatric Mental Health Diagnosis and Management Practicum
5 credit hours Focuses on identifying clinical problems and recognizing system implications. Students will use technology to identify clinical and research evidence and critically analyze the evidence for rigor and applicability to the clinical setting. Students write a culminating evidence-based review paper.

NURS 6601 - FNP I Women's Health
3 credit hours Prerequisites: Admission to the MTSU MSN program; NURS 6000 , NURS 6002, NURS 6003, NURS 6101 , NURS 6102 , NURS 6103 , NURS 6112; corequisite: NURS 6602. Focuses on advanced practice nursing and health care management of women in diverse populations. Includes biopsychosocial interactions, affecting women throughout the lifespan. Offered spring, summer, and fall semesters.

NURS 6602 - FNP I Women's Health Clinical
2 credit hours Prerequisites: Admission to the MTSU MSN program; NURS 6000 , NURS 6002, NURS 6003, NURS 6101 , NURS 6102 , NURS 6103 , NURS 6112; corequisite: NURS 6601. Focuses on the delivery of advanced nursing care to women. Various clinical settings with diverse populations may be employed for clinical practice. Offered spring, summer, and fall semesters.

NURS 6603 - FNP II Adult Health
3 credit hours Prerequisites: Admission to the MTSU MSN program; NURS 6000 , NURS 6002, NURS 6003, NURS 6101 , NURS 6102 , NURS 6103 , NURS 6112; corequisite: NURS 6604. Focuses on advanced practice nursing and healthcare management of adults and older adults in diverse populations. Includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic illnesses, and life transitions. Offered spring, summer, and fall semesters.

NURS 6604 - FNP II Adult Health Clinical
4 credit hours Prerequisites: NURS 6000 , NURS 6002, NURS 6003, NURS 6101 , NURS 6102 , NURS 6103 , NURS 6112; corequisite: NURS 6603. Focuses on advanced practice nursing and healthcare management of adults and older adults in diverse populations. Includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic

illnesses and life transitions. Offered spring, summer, and fall semesters.

NURS 6605 - FNP III Pediatrics
3 credit hours Prerequisites: Admission to the MTSU MSN program; NURS 6000 , NURS 6002, NURS 6003, NURS 6101 , NURS 6102 , NURS 6103 , and NURS 6112; corequisite: NURS 6606. Focuses on advanced nursing and healthcare management of children and adolescents. Includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic illnesses, and developmental transitions within the family context. Offered spring, summer, and fall semesters.

NURS 6606 - FNP III Pediatrics Clinical
2 credit hours Prerequisites: Admission to the MTSU MSN program; NURS 6000 , NURS 6002, NURS 6003, NURS 6101 , NURS 6102 , NURS 6103 , NURS 6112; corequisite: NURS 6605. Focuses on advanced nursing and healthcare management of children and adolescents. Includes developmental, physiological, pathological, and psychosocial changes relative to health maintenance, acute and chronic illnesses, and developmental transitions within the family context. Offered spring, summer, and fall semesters.

NURS 6609 - FNP Practicum
5 credit hours Prerequisites: Admission to the MTSU MSN program; NURS 6000 , NURS 6001, NURS 6002, NURS 6003, NURS 6601, NURS 6602, NURS 6603, NURS 6604, NURS 6605, NURS 6606; corequisite: NURS 6990. Focuses on the synthesis of previously gained knowledge and skills in the provision of advanced nursing care to individuals, families, and communities. Emphasis placed on health promotion, disease prevention, and clinical management of clients with common acute and chronic illnesses.

NURS 6990 - Scholarly Synthesis
3 credit hours Pre- or corequisite: All MTSU MSN nursing courses; NURS 6209 or NURS 6309 or NURS 6410 or NURS 6609. A culminating experience which provides the opportunity to synthesize current knowledge in the major or concentration area of study. Offered spring, summer, and fall semesters. To be taken the last semester of study or by permission from the department. Offered spring, summer, and fall semesters.

Psychology

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www.mtsu.edu/psychology/
The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Quantitative Psychology, and Pre-Specialist in Education: School Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level.

Curriculum and Instruction, School Psychology Concentration, Ed.S.

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The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Pre-Specialist in Education: School Psychology, and Quantitative Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level.
The School Psychology program includes two degrees. Program completion and endorsement for a State Department of Education license require successful completion of both degrees. The M.A. portion of the program comes first. The Ed.S. is an advanced degree. It is only available to students who have master's degrees in School Psychology. Transfer students from other master's programs in Psychology or Counseling may apply, but they will be required to complete deficiencies.
The School Psychology program is field-based. As such, a student is required to be continuously enrolled in at least one field-based course every semester from the completion of PSY 6140 until the completion of the program. PSY 6960, PSY 6980, PSY 7080, and PSY 7810 are field-based courses. The policy excludes summer sessions.
Tennessee teacher licensing in school psychology is obtained through MTSU's program. Licensing requires (1) completion of the Ed.S. with a concentration in School Psychology, (2) 1,200 hours of internship in school psychology, (3) acceptable scores on the school psychology Praxis II Test, and (4) verification of readiness for independent practice by an internship supervisor. The School Psychology PRAXIS II test assesses the following areas: a) professional practices that permeate all aspects of service, b) direct and indirect services for children, families, and schools, c) system-level services, and d) foundations of school psychological services delivery.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Specialist in Education degree with a concentration in School Psychology usually requires

1. an earned master's degree in psychology, educational psychology, or school counseling from an accredited university or college. Normally, candidates should have completed all courses listed under the M.A. program for the Pre-Specialist in Education: School Psychology concentration;
2. an acceptable undergraduate grade point average (at least 3.00) in all college work taken;
3. a minimum score of 291 on the combined verbal and quantitative measures of the Graduate Record Examination (GRE).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application Deadlines: Applications for Summer/Fall admission must be complete by March 1, and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE-a minimum of 291 (current scale) or 900 (former scale) on the combined Verbal and Quantitative sections is expected;
3. submit official transcripts of all previous college work;
4. submit the supplemental School Psychology program application (found online at **www.mtsu.edu/schoolpsychology**);
5. submit three (3) reference forms (found **online**). It is recommended that at least two references should be completed by faculty who can attest to the applicant's academic abilities;

6. submit a current curriculum vita that includes education and employment history, research involvement, volunteer activities, references, and awards/scholarships;
7. submit a statement of purpose, including reasons for interest in the field of school psychology and the program at MTSU and a description of professional goals. (Typically two to three [2-3] pages in length.)

NOTE 1: Admission to graduate study is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision.
NOTE 2: ***To be considered for a graduate assistantship students must submit additional materials. Information about the application procedure is available at www.mtsu.edu/psychology/grad/assistantship.php.***

Degree Requirements

The Ed.S. in Curriculum and Instruction with a concentration in School Psychology requires completion of 31 semester hours.
Candidate must

1. be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements. See each area coordinator and program handbook for readmission policy.
2. complete 31 graduate semester hours (see Curriculum section below for specifics) with a minimum of 15 hours at the 7000 level.
3. satisfy a residency requirement consisting of
    a. the completion of 18 semester hours of graduate study within a 12-month period and
    b. full-time enrollment (at least 9 semester hours) for a least one semester.
4. complete FOED 6610/FOED 7610 (for those who did not have a thesis listed on their transcripts as part of their master's degree).
5. complete courses in the following areas (based on National Association of School Psychologists 2020 standards):
    a. data-based decision making and accountability;
    b. consultation and collaboration;
    c. interventions and instructional support to develop academic skills;
    d. interventions and mental health services to develop social and life skills;
    e. school-wide services to promote safe and supportive schools;
    f. preventive and responsive services;
    g. family, school, and community collaborations;
    h. diversity in development and learning;
    i. research and program evaluation;
    j. legal, ethical, and professional practice.
6. complete PSY 7810, an internship of 1,200 hours as a capstone experience.
7. pass a written comprehensive examination approved by the faculty (may be taken no more than twice).
8. maintain professional liability insurance (coverage amount at the student's discretion) throughout enrollment in the program, with a current insurance binder filed with the department at all times.

Curriculum: Curriculum and Instruction, School Psychology

The following illustrates the coursework requirements.

Required Courses (31 hours)

- PSY 6105 - Psychoeducational Assessment of Preschool Children **3 credit hours**
- PSY 6140 - Practicum: School Psychology **3 credit hours**
- PSY 6661 - Program Evaluation **3 credit hours**
- PSY 6875 - Practicum: Consultation/Collaboration in School Psychology **3 credit hours**
- PSY 7080 - Practicum: Advanced Interventions with Children **3 credit hours**
- PSY 7100 - Multicultural and Social Bases for Assessment and Intervention Practices **3 credit hours**
- PSY 7200 - School Neuropsychology **3 credit hours**
- PSY 7810 - Advanced Internship: School Psychology **3 to 6 credit hours each semester for two semesters (10 credit hours required)**

Program Notes

If changes to the program are needed (such as course substitutions), students should file a Revision Form available on the Graduate Studies website at www.mtsu.edu/graduate/forms.php.

Psychology Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Psychology, Clinical Concentration, M.A.

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The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Pre-Specialist in Education: School Psychology, and Quantitative Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level. Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to graduate study in Clinical Psychology is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision.
In order to be considered for unconditional admission, candidates must meet two standards: an undergraduate grade point average (GPA) of 3.00 or higher and a minimum score on the Graduate Record Exam (GRE). A minimum of 291 on the combined Verbal and Quantitative sections is expected for the Clinical Psychology concentration within the Master of Arts in Psychology.
Applications for Summer/Fall admission must be complete by March 1 and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis. Applicants to the Clinical Psychology program should see below for a supplemental application and reference forms. Students who do not meet admission requirements may be admitted as non-degree seeking to the Clinical Psychology program. Students admitted as non-degree seeking must maintain a 3.25 GPA in their first semester (9 hours minimum) of required graduate courses to be fully admitted to the program.
Applicants must demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Clinical Program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):

a. group measurement/testing (PSY 4260/PSY 5260 or PSY 6050);
b. abnormal psychology (PSY 3230/PSY 5230);
c. learning or cognition (PSY 4040, PSY 4480, PSY 5480*, or PSY 6190*);
d. social or developmental (PSY 2210, PSY 2300, PSY 4190, PSY 4210/PSY 5210, PSY 4610/ PSY 5610, PSY 6120*, PSY 6130*, PSY 6410);
e. brain and behavior, sensation and perception, or research methods (PSY 3070, PSY 4780/PSY 5780, PSY 4240/PSY 5240, or PSY 4030/PSY 5030);
f. basic statistics (PSY 3020).

Courses marked with an asterisk (*) may be counted as approved graduate electives depending upon specialization. Most applicants have completed 15 semester hours of psychology classes prior to admission to their graduate programs. Those applicants without 15 semester hours of undergraduate psychology may be admitted to the programs but must complete those credits in addition to their graduate programs.
Previous students seeking readmission to the Clinical Psychology program should contact the graduate program director and refer to the program handbook for readmission policy. All potential students must apply to the clinical program and will be evaluated on the current criteria as delineated in the graduate catalog (i.e., GRE, GPA, transcript, three supplemental reference forms, current resume or curriculum vita, and the supplemental clinical application).
If a student already has an M.A. degree from either the Clinical or School Psychology programs at MTSU and wants to return to take specific courses to prepare for either the psychological assistant or the behavior analysis specialization, they may be considered in the applicant pool. If admitted, however, no new degree would be obtained; the student would be a non-degree-seeking student but would be admitted to take specific clinical courses.
If a student has a master's degree or graduate coursework from another MTSU program or from another university, they may also be considered in the applicant pool. If accepted, credit for previous coursework would be allocated on an individual basis, consistent with the following MTSU policies:

1. If no previous graduate degree was obtained, up to 12 graduate credit hours may be applied to the Clinical master's degree.
2. If a previous master's degree was obtained, no credit that applied to that degree can be applied to the Clinical master's degree at MTSU. Additional coursework would be necessary to meet the 46-hour program requirement.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit official scores on the Graduate Record Examination (GRE);
4. submit the required supplementary application (online at **www.mtsu.edu/psychology/forms/clinicalsupappl.pdf)**;
5. submit three required supplemental reference forms (online at **www.mtsu.edu/psychology/forms/clinicalsupref.pdf**);
6. submit a current resume or curriculum vitae.

NOTE: ***To be considered for a graduate assistantship, students must submit additional materials. Information about the application procedure is available at www.mtsu.edu/psychology/grad/assistantship.php.***

Degree Requirements

The Master of Arts degree in Psychology with a Clinical concentration requires completion of a minimum of 46 semester hours including at least 33 hours in psychology. Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses.
Candidate must

1. complete PSY 6640 (3 hours);
2. successfully write and orally present an empirical thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
3. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice).

Curriculum: Psychology, Clinical

The following illustrates the minimum coursework requirements.

Core Clinical Courses (28-34 hours)

All clinical students are required to take the following:

- PSY 5470 - Theories of Counseling **3 credit hours** OR
- PSY 6841 - Theories of Individual Psychotherapy **3 credit hours** OR
- PSY 6080 - Interventions with Children and Adolescents **3 credit hours**
  (PSY 6080 must be taken for Behavior Analysis specialization.)

- PSY 6020 - Theories of Personality **3 credit hours** (not required for ABA students)
- PSY 6100 - Intellectual Assessment **3 credit hours**
- PSY 6101 - Laboratory in Intellectual Assessment **1 credit hours**
- PSY 6250 - Objective Personality Assessment **3 credit hours**

- PSY 6280 - Psychological Statistics: Regression **3 credit hours** *
- PSY 6281 - Psychological Statistics: Regression Lab **0 credit hours** *
- PSY 6290 - Psychological Statistics: ANOVA **3 credit hours** *
- PSY 6291 - Psychological Statistics: ANOVA Lab **0 credit hours** *
- PSY 6400 - Psychological Disorders of Children **3 credit hours** (required for ABA students only)
- PSY 6510 - Psychopathology **3 credit hours**
- PSY 6640 - Thesis Research **1 to 6 credit hours** (total of 3 credits required)
- PSY 6690 - Professional Issues and Roles **3 credit hours**
- PSY 6801 - Interviewing and Intervention **3 credit hours**
- PSY 6851 - Assessment Field Practicum (Clinical) **3 credit hours**
  NOTE:** ***ABA specialization students must choose one from either PSY 6280/PSY 6281 or PSY 6290/PSY 6291.

Specialization (12-18 hours)

In addition to the required courses in the core area and the research area, students in the Clinical concentration must take 12-18 elective credits to form a specialization. Students must choose a specialization from the following set within the Clinical concentration:

Psychological Assistant: General Clinical Specialization (12 hours)

Choose four courses (12 hours) from the following list. At least one of these courses must be marked with an asterisk (*).

- PSY 5480 - Learning Theories **3 credit hours** *
- PSY 5610 - Adult Development and Aging **3 credit hours**
- PSY 5720 - Multicultural Perspectives in Psychology and Education **3 credit hours**
- PSY 5780 - Human Neuropsychology **3 credit hours** *
- PSY 6120 - Developmental Psychology: Child **3 credit hours**
- PSY 6130 - Developmental Psychology: Adolescent **3 credit hours**
- PSY 6190 - Advanced Cognitive Psychology **3 credit hours** *
- PSY 6340 - Behavioral Medicine: Theory and Application **3 credit hours**
- PSY 6390 - Independent Research in Psychology: Clinical **1 to 9 credit hours** (3 credit hours total)
- PSY 6400 - Psychological Disorders of Children **3 credit hours**
- PSY 6440 - Advanced Applied Behavioral Analysis **3 credit hours**
- PSY 6500 - Behavioral Methodology **3 credit hours**
- PSY 6520 - Psychopharmacology **3 credit hours** *
- PSY 6580 - Multivariate Data Analysis **3 credit hours**
- PSY 6770 - Assessment and Therapeutic Interventions for Children's Emotional Problems **3 credit hours**
- PSY 6780 - Clinical Neuropsychology **3 credit hours** *
- PSY 7100 - Multicultural and Social Bases for Assessment and Intervention Practices **3 credit hours**
- PSY 7520 - Assessment and Treatment of Addictions **3 credit hours**

Health/Neuropsychology Specialization (12 hours)

Required (3 hours)

- PSY 6780 - Clinical Neuropsychology **3 credit hours**

Electives (9 hours)

Choose three courses (9 hours) from the following:

- PSY 5780 - Human Neuropsychology **3 credit hours**
- PSY 6340 - Behavioral Medicine: Theory and Application **3 credit hours**
- PSY 6390 - Independent Research in Psychology: Clinical **1 to 9 credit hours** (3 hours total)
- PSY 6520 - Psychopharmacology **3 credit hours**
- PSY 7520 - Assessment and Treatment of Addictions **3 credit hours**

Behavior Analysis Specialization (18 hours)

Required (15 hours)

- PSY 5430 - Ethical Conduct in Behavior Analysis **3 credit hours**

- PSY 5480 - Learning Theories **3 credit hours** OR
- PSY 6785 - Principles of Behavior Analysis **3 credit hours**

- PSY 6400 - Psychological Disorders of Children **3 credit hours**
- PSY 6440 - Advanced Applied Behavioral Analysis **3 credit hours**
- PSY 6500 - Behavioral Methodology **3 credit hours**

Elective (3 hours)

Choose 3 hours from the following:

- PSY 6390 - Independent Research in Psychology: Clinical **1 to 9 credit hours** (3 credit hours total)
- SPED 5240 - Methods and Techniques of Behavior Management **3 credit hours**
- SPED 5280 - Assistive Technology in Special Education **3 credit hours**
- SPED 6730 - Methods of Instruction for Students with Autism Spectrum Disorders **3 credit hours**

Program Notes

Students must be admitted to the clinical program prior to enrolling in most required clinical core courses. Non-degree-seeking students may not enroll in required clinical courses, except by special permission.
Professional liability insurance ($1,000,000 each incident/$3,000,000 annual aggregate) must be maintained throughout enrollment in the program with a current insurance binder filed with the department at all times.
Students must be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements.
If changes to the program are needed (such as course substitutions), students should file a Revision Form available on the Graduate Studies website at www.mtsu.edu/graduate/forms.php.

Psychology, Experimental Concentration, M.A.

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The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Pre-Specialist in Education: School Psychology, and Quantitative Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level.

A major goal of the Experimental concentration in Psychology is to prepare the student to be a research psychologist. The primary objective is to prepare the student to enter a Ph.D. program in psychology. However, many industries, clinical settings, and research universities are interested in students with the analytical and statistical skills of a research psychologist. In addition, students with master's degrees in experimental psychology may also be employed as faculty at the community college level as psychology instructors.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to graduate study in experimental psychology is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision.

In order to be considered for unconditional admission, candidates must meet two standards: an undergraduate grade point average (GPA) of 3.00 or higher and a minimum score on the Graduate Record Exam (GRE). A minimum of 291 on the combined Verbal and Quantitative sections is expected for the Experimental concentration within the Master of Arts in Psychology.

Applications for Summer/Fall admission must be complete by March 1, and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis. Students who do not meet admission requirements may be admitted as non-degree seeking to the Experimental concentration. Students admitted as non-degree seeking must maintain a 3.25 GPA in their first semester (9 hours minimum) of required graduate courses in the concentration area to be fully admitted.

Previous students seeking readmission to the Experimental program should contact the graduate program director and refer to the program handbook for readmission policy.

Experimental students need to have a strong background in the core areas of experimental psychology. Some of this background can be attained at the undergraduate level; however, students must also complete a core of graduate experimental courses. In addition, students are encouraged to become involved in research and to participate in research projects throughout their graduate enrollment. Toward this goal, the student should enroll in at least one hour of research (PSY 6600) or thesis work (PSY 6640) each semester.

Applicants must demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Experimental program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):

1. introductory/general psychology (PSY 1410);
2. research methods (PSY 3070);
3. social psychology or personality (PSY 2210, 3230/PSY 5230, 3590, PSY 6020, or PSY 6030);
4. cognition or learning (PSY 4040, 4480/PSY 5480, or PSY 6190);
5. developmental (PSY 2300, 4190, 4210/PSY 5210, 4610/PSY 5610, PSY 6120, PSY 6130, PSY 6410);
6. brain and behavior or sensation and perception (PSY 2190, 4030/PSY 5030, 4240/PSY 5240, or 4780/ PSY 5780);
7. statistics (PSY 3020).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of reference;
4. submit letter of intent stating career goals, relevant work/academic experience, and research interests;
5. submit official scores on the Graduate Record Examination (GRE);
6. submit a current resume or curriculum vitae.

NOTE: ***To be considered for a graduate assistantship, students must submit additional materials. Information about the application procedure is available at www.mtsu.edu/psychology/grad/assistantship.php.***

Degree Requirements

The major in Psychology with a concentration in Experimental requires completion of 36 semester hours including at least 30 hours in graduate psychology courses. Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses.
Candidate must

1. complete PSY 6280 and PSY 6290;
2. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
3. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice).

Curriculum

The following illustrates the coursework requirements.

Core Courses (27 hours)

- PSY 5080 - Advanced Research Methods **3 credit hours**
- PSY 5240 - Behavioral Neuroscience **3 credit hours**

- PSY 6810 - Literature Review and Reading in Psychology: Social **1 to 3 credit hours (3 credit hours)** OR
- PSY 6020 - Theories of Personality **3 credit hours**

- PSY 6120 - Developmental Psychology: Child **3 credit hours** OR
- PSY 6130 - Developmental Psychology: Adolescent **3 credit hours** OR
- PSY 6410 - Development Across the Lifespan **3 credit hours**

- PSY 6190 - Advanced Cognitive Psychology **3 credit hours**
- PSY 6280 - Psychological Statistics: Regression **3 credit hours**
- PSY 6290 - Psychological Statistics: ANOVA **3 credit hours**
- PSY 6600 - Independent Research in Psychology: General and Experimental **1 to 9 credit hours** (3 hours total)
- PSY 6640 - Thesis Research **1 to 6 credit hours** (3 hours total)

Literature Review and Reading in Psychology (3 hours)

- PSY 6590 - Literature Review and Reading in Psychology: General and Experimental **1 to 3 credit hours**
- PSY 6660 - Literature Review and Reading in Psychology: Quantitative **1 to 3 credit hours**
- PSY 6670 - Literature Review and Reading in Psychology: Behavioral Neuroscience **1 to 3 credit hours**
- PSY 6680 - Literature Review and Reading in Psychology: Cognitive **1 to 3 credit hours**
- PSY 6700 - Literature Review and Reading in Psychology: Developmental **1 to 3 credit hours**
- PSY 6720 - Literature Review and Reading in Psychology: Learning **1 to 3 credit hours**
- PSY 6730 - Literature Review and Reading in Psychology: Personality **1 to 3 credit hours**
- PSY 6740 - Literature Review and Reading in Psychology: Reading **1 to 3 credit hours**
- PSY 6790 - Literature Review and Reading in Psychology: Sensation and Perception **1 to 3 credit hours**
- PSY 6810 - Literature Review and Reading in Psychology: Social **1 to 3 credit hours**

Electives (6 hours)

To be chosen with the approval of the student's advisor.

Program Notes

Students must be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements.

Psychology, Industrial/Organizational Concentration, M.A.

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The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Pre-Specialist in Education: School Psychology, and Quantitative Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level.
The goal of the Industrial/Organizational (I/O) concentration is to produce professionals who are able to apply the science of psychology in business, industry, and government settings. The program is designed to prepare students for positions in human resource departments or consulting, or for entry into an I/O doctoral program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to graduate study in Industrial/Organizational Psychology is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision.
In order to be considered for admission, candidates must meet the following standards: an undergraduate grade point average (GPA) of 3.00 or higher and a minimum score of 141 on the quantitative measure of the Graduate Record Examination is expected for admission. Additionally, all applicants should have successfully completed an undergraduate course in statistics.
Applications for Summer/Fall admission must be complete by March 1 and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicants to the Industrial/Organizational Psychology program must provide a letter of intent stating goals and objectives.
Students who do not meet admission requirements may be admitted as non-degree seeking. Students admitted as non-degree seeking must maintain a 3.25 GPA in their first semester (9 hours minimum) of required graduate courses in their concentration areas to be fully admitted to the program.
Most applicants have completed 15 semester hours in the core areas of psychology prior to admission to the graduate program in Industrial/Organization psychology. Those applicants without 15 semester hours in core areas of psychology may be admitted to the program but must complete those credits at the undergraduate or graduate level. See additional requirements listed below.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of previous college work;
3. submit letter of interest/intent;
4. submit official scores on the Graduate Record Examination (GRE);
5. submit three letters of recommendation;
6. submit a resume' or curriculum vitae.

For more information about application materials, please see www.mtsu.edu/programs/psychology-ma-io/.
NOTE 1: ***Admission to graduate study is competitive and not automatic for students meeting minimal admission requirements. Each year the number of students admitted depends on the availability of adequate faculty supervision.***
NOTE 2: ***To be considered for graduate assistantships, student must submit additional material. Information is available at www.mtsu.edu/psychology/grad/assistantship.php.***

Degree Requirements

The Master of Arts with an Industrial/Organizational concentration is designed as a 43-hour program for students who have demonstrated knowledge of the core areas of psychology ***prior*** to entering the Industrial/Organizational program.
Students must complete a minimum of 43 semester hours including at least 38 hours in psychology courses. Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses.
Candidate must

1. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
2. pass a written comprehensive examination prepared by the Industrial/Organizational faculty (may be taken no more than twice).

Curriculum: Psychology, Industrial/Organizational

The following illustrates the minimum coursework requirements.

Required Courses (6 hours)

- PSY 6280 - Psychological Statistics: Regression **3 credit hours**
- PSY 6281 - Psychological Statistics: Regression Lab **0 credit hours**
- PSY 6290 - Psychological Statistics: ANOVA **3 credit hours**
- PSY 6291 - Psychological Statistics: ANOVA Lab **0 credit hours**

Core Courses (22 hours)

- PSY 6070 - Advanced Industrial Organizational Training and Development **3 credit hours**
- PSY 6090 - Internship: Industrial/Organizational Psychology **3 credit hours**
- PSY 6300 - Literature Review and Reading in Psychology: Industrial and Organizational **2 credit hours**
- PSY 6320 - Performance Appraisal and Job Analysis **3 credit hours**
- PSY 6330 - Professional Issues in Industrial and Organizational Psychology **1 credit hours**
- PSY 6420 - Advanced Personnel Selection and Placement **3 credit hours**
- PSY 6450 - Advanced Organizational Psychology **3 credit hours**
- PSY 6570 - Psychological Research Methods in Human Resource Management **3 credit hours**
- PSY 6085 - Pre-Internship: Industrial/Organizational Psychology **1 credit hours**

Electives (12 hours)

At least two of the following four courses must be among the electives selected:

- PSY 5290 - Compensation System Design and Administration **3 credit hours**
- PSY 6360 - Organizational Change and Development **3 credit hours**
- PSY 6365 - Organizational Surveys and Employee Attitudes and Motivation **3 credit hours**
- PSY 6380 - Work Group Effectiveness **3 credit hours**
  NOTE*: Students may fulfill all 12 elective hours by taking all four classes above. If interested in one or two alternate elective courses, consult your advisor. Following are examples of alternate electives that are sometimes available:*
- PSY 5340 - Human Factors Psychology **3 credit hours**
- PSY 6460 - Factor Analysis and Related Methods **3 credit hours**

NOTE: ***This is not an inclusive list of all potential alternate electives, and some may be available from other departments. Advisor approval required for all electives.***

- PSY 5830 - Occupational Health Psychology **3 credit hours**

Thesis (3 hours)

- PSY 6640 - Thesis Research **1 to 6 credit hours (3 hours required)**

Additional Requirements (0-15 hours)

Students who lack one or more of the core areas of psychology will be required to complete additional coursework to fulfill the requirements listed below. Relevant courses offered at MTSU are listed in parentheses.

a. group measurement/testing (PSY 4260/PSY 5260);
b. abnormal psychology or personality (PSY 3230/PSY 5230, PSY 3590, or PSY 6020);
c. learning or cognition (PSY 4040, PSY 4480/PSY 5480, or PSY 6190);
d. social or developmental (PSY 2210, PSY 2300, PSY 4190, PSY 4210, PSY 4610/PSY 5610, or PSY 6380);
e. introductory course in I/O psychology (PSY 3320).

Program Notes

Students must be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements.

Psychology, Pre-Specialist in Education: School Psychology Concentration, M.A.

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The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Pre-Specialist in Education: School Psychology, and Quantitative Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level.
The School Psychology program includes two degrees. Program completion and endorsement for a State Department of Education license require successful completion of both degrees. The M.A. portion of the program comes first. The Ed.S. is an advanced degree. It is only available to students who have master's degrees in School Psychology. Transfer students from other master's programs in Psychology or Counseling may apply, but they will be required to complete deficiencies.
The School Psychology program is field-based. As such, a student is required to be continuously enrolled in at least one field-based course every semester from the completion of PSY 6140 until the completion of the program. PSY 6960, PSY 6980, PSY 7080, and PSY 7810 are field-based courses. The policy excludes summer sessions.
Tennessee teacher licensing in school psychology is obtained through MTSU's program. Licensing requires (1) completion of the Ed.S. with a concentration in School Psychology, (2) 1,200 hours of internship in school psychology, (3) acceptable scores on the School Psychology Praxis II Test, and (4) verification of readiness for independent practice by an internship supervisor. The School Psychology PRAXIS II test assesses the following areas: a) professional practices that permeate all areas; b) direct and indirect services for children, families, and schools, c) systems-level services, and d) foundations of school psychological services delivery.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Arts in Psychology with Pre-Specialist in Education: School Psychology concentration requires

1. an earned bachelor's degree from an accredited university or college. Most applicants have completed 15 semester hours of psychology classes prior to admission to their graduate programs. Those applicants without 15 semester hours of undergraduate psychology may be admitted to the programs but must complete those credits in addition to their graduate programs.
2. an acceptable undergraduate grade point average (at least 3.00) in all college work taken.
3. completion of the Graduate Record Examination (GRE) with acceptable scores.

NOTE: ***Students who do not meet admission requirements may be admitted as non-degree seeking to a specific concentration. Students admitted as non-degree seeking must maintain a 3.25 GPA in their first semester (9 hours minimum) of required graduate courses in their concentration areas.***

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application Deadlines: Applications for Summer/Fall admission must be complete by March 1, and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE-a minimum of 291 on the combined Verbal and Quantitative sections is expected.

3. submit official transcripts of all previous college work.
4. submit the supplemental School Psychology program application.
5. submit three (3) reference forms (found **online**). It is recommended that at least two references should be completed by faculty who can attest to the applicant's academic abilities.
6. submit a current curriculum vita that includes education and employment history, research involvement, volunteer activities, references, and awards/scholarships.
7. submit a statement of purpose, including reasons for interest in the field of School Psychology and the program at MTSU, and a description of professional goals. (Typically two to three [2-3] pages in length).

NOTE 1: Admission to graduate study is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision.
NOTE 2: ***Applicants to the School Psychology programs should contact the department for a special application and reference forms.***
NOTE 3: ***To be considered for a graduate assistantship, students must submit additional materials. Information about the application procedure is available at www.mtsu.edu/psychology/grad/assistantship.php.***

Degree Requirements

The Master of Arts in Psychology with a concentration in Pre-Specialist in Education: School Psychology requires completion of a minimum of 38 semester hours.
Candidate must

1. be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements. See each area coordinator and program handbook for readmission policy.
2. be continuously enrolled in at least one field-based course every semester from the completion of PSY 6140 until the completion of the program, with the exception of summer sessions.
3. demonstrate knowledge of the core areas of psychology by completing the following courses prior to entering the School Psychology program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
    a. testing (PSY 6100 and PSY 6101; PSY 4260 or equivalent is a prerequisite);
    b. abnormal psychology (PSY 6400);
    c. learning (PSY 6440);
    d. developmental (PSY 6120, PSY 6130, or PSY 6410);
    e. research methods (PSY 6640 [3 hours], PSY 6615 [3 hours]).
4. complete a total of 38 semester hours (see Curriculum section below for specifics). Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses; students without at least an undergraduate minor in psychology (at least 15 hours) will be required to complete up to 15 hours of additional psychology coursework that will not count toward the M.A. degree.
5. complete PSY 6280/PSY 6281 or PSY 6290/PSY 6291\.
6. successfully write and orally present a written thesis evaluated by a committee of Psychology faculty in conjunction with PSY 6640.
7. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice).
8. maintain professional liability insurance (coverage amount at the student's discretion) throughout enrollment in the program, with a current insurance binder filed with the department at all times.

Curriculum

Candidate must complete 38 hours in the following course of study:

Required Courses (20 hours)

- PSY 6060 - School Psychology: Ethics and Practice **3 credit hours**
- PSY 6080 - Interventions with Children and Adolescents **3 credit hours**
- PSY 6100 - Intellectual Assessment **3 credit hours**
- PSY 6101 - Laboratory in Intellectual Assessment **1 credit hours**
- PSY 6750 - Psychology and Assessment of Learning Disabilities **3 credit hours**
- PSY 6760 - Educational Assessment **1 credit hours**
- PSY 6770 - Assessment and Therapeutic Interventions for Children's Emotional Problems **3 credit hours**
- PSY 6065 - Introduction to School-Based Mental Health Services **3 credit hours**

Abnormal Psychology (3 hours)

- PSY 6400 - Psychological Disorders of Children **3 credit hours**

Learning or Cognition (3 hours)

- PSY 6440 - Advanced Applied Behavioral Analysis **3 credit hours**

Developmental Psychology (3 hours)

Select one from the following:

- PSY 6120 - Developmental Psychology: Child **3 credit hours**
- PSY 6130 - Developmental Psychology: Adolescent **3 credit hours**
- PSY 6410 - Development Across the Lifespan **3 credit hours**

Research Methods (6 hours)

- PSY 6615 - Basic and Applied Research Methods in Psychology **3 credit hours**
- PSY 6640 - Thesis Research **1 to 6 credit hours (3 credit hours required)**

Statistics (3 hours)

Choose one:

- PSY 6280 - Psychological Statistics: Regression **3 credit hours** AND
- PSY 6281 - Psychological Statistics: Regression Lab **0 credit hours**

- PSY 6290 - Psychological Statistics: ANOVA **3 credit hours** AND
- PSY 6291 - Psychological Statistics: ANOVA Lab **0 credit hours**

Program Notes

If changes to the program are needed (such as course substitutions), students should file a Revision Form available on the Graduate Studies website at www.mtsu.edu/graduate/forms.php.

Psychology, Quantitative Psychology Concentration, M.A.

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The Department of Psychology offers programs which lead to two graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Pre-Specialist in Education: School Psychology, and Quantitative Psychology and the Specialist in Education with a major in Curriculum and Instruction and concentration in School Psychology. The department also offers a minor at the graduate level. Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Arts in Psychology with a concentration in Quantitative Psychology requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (at least 3.00 or higher) in all college work taken;
3. an acceptable score on the Graduate Record Examination (GRE)-generally a minimum of 291 on the combined Verbal and Quantitative sections is expected.

NOTE: Students who do not meet admission requirements may be admitted as non-degree seeking to a specific concentration. Students admitted as non-degree seeking must maintain a 3.25 GPA in their first semester (9 hours minimum) of required graduate courses in their concentration areas in order to be fully admitted.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application Deadlines: Applications for Summer/Fall admission must be complete by March 1, and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit official GRE scores;
4. submit letter of intent stating goals and objectives;
5. submit three required recommendation forms;
6. submit a current resume or curriculum vitae.

NOTE 1: Admission to graduate study is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision.
NOTE 2: ***To be considered for a graduate assistantship, students must submit additional materials by the deadline (October 1 for spring admissions; March 1 for fall admissions). Information about the application procedure is available at www.mtsu.edu/psychology/grad/assistantship.php.***

Degree Requirements

The Master of Arts in Psychology with a concentration in Quantitative Psychology requires completion of a minimum of 36 hours (thesis) or 36 hours (non-thesis).
Candidate must

1. be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross

professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements. See each area coordinator and program handbook for readmission policy.

2. demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Quantitative program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
    a. basic statistics (PSY 3020)
    b. research methods (PSY 3070/PSY 3071 or PSY 4080/PSY 5080)
    c. group measurement/testing (PSY 4260/PSY 5260)
    d. abnormal psychology, personality, social, or developmental (PSY 2210, 2300, 3230/PSY 5230, 3590, 4190, 4210/PSY 5210, 4610/PSY 5610, PSY 6020, PSY 6030, PSY 6120, PSY 6130, or PSY 6410)
    e. learning, cognition, brain and behavior, or sensation and perception (PSY 2190, 4040, 4480/PSY 5480, 4780/PSY 5780, 4240/PSY 5240, 4030/PSY 5030, or PSY 6190).
3. complete PSY 6280 and PSY 6290.
4. complete a minimum of 36 semester hours, including at least 30 hours in psychology (see Curriculum section below for specifics). Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses.
5. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice);
6. complete either the thesis or non-thesis curriculum as detailed below in the Curriculum Section;
7. if choosing the thesis option, successfully write and orally present a written thesis evaluated by a committee of Psychology faculty in conjunction with PSY 6640 (thesis, 3 hours).

Curriculum: Psychology, Quantitative Psychology

The following illustrates the coursework requirements.

Thesis Option (36 hours)

The M.A. in Quantitative Psychology is designed as a 36-hour program for students who have demonstrated knowledge of the core areas of psychology prior to entering the Quantitative Psychology program. Candidate must complete the following course of study:

Required (30 hours)

- PSY 6210 - Advanced Psychometrics **3 credit hours** OR
- PSY 7210 - Advanced Psychometrics **3 credit hours**

- PSY 6280 - Psychological Statistics: Regression **3 credit hours**
- PSY 6281 - Psychological Statistics: Regression Lab **0 credit hours**
- PSY 6290 - Psychological Statistics: ANOVA **3 credit hours**
- PSY 6291 - Psychological Statistics: ANOVA Lab **0 credit hours**
- PSY 6460 - Factor Analysis and Related Methods **3 credit hours**
- PSY 6560 - Computer-Based Statistical Packages **3 credit hours**

- PSY 6565 - Behavioral Statistics Using R **3 credit hours** OR
- PSY 7565 - Behavioral Statistics Using R **3 credit hours**

- PSY 6580 - Multivariate Data Analysis **3 credit hours** OR
- PSY 7580 - Multivariate Data Analysis **3 credit hours**

- PSY 6575 - Multilevel Analysis **3 credit hours** OR
- PSY 7575 - Multilevel Analysis **3 credit hours**

- PSY 6660 - Literature Review and Reading in Psychology: Quantitative **1 to 3 credit hours (3 credit hours)**
- PSY 6640 - Thesis Research **1 to 6 credit hours (3 credit hours)**

Electives (6 hours)

Students must take 6 elective credits in addition to required courses. The courses may be in psychology or related areas with the permission of the academic advisor.

Non-thesis Option (36 hours)

The M.A. in Quantitative Psychology is designed as a 36-hour program for students who have demonstrated knowledge of the core areas of psychology prior to entering the Quantitative Psychology program. Candidate must complete the following course of study:

Required (30 hours)

- PSY 6210 - Advanced Psychometrics **3 credit hours** OR
- PSY 7210 - Advanced Psychometrics **3 credit hours**

- PSY 6280 - Psychological Statistics: Regression **3 credit hours**
- PSY 6281 - Psychological Statistics: Regression Lab **0 credit hours**
- PSY 6290 - Psychological Statistics: ANOVA **3 credit hours**
- PSY 6291 - Psychological Statistics: ANOVA Lab **0 credit hours**
- PSY 6460 - Factor Analysis and Related Methods **3 credit hours**
- PSY 6560 - Computer-Based Statistical Packages **3 credit hours**

- PSY 6565 - Behavioral Statistics Using R **3 credit hours** OR
- PSY 7565 - Behavioral Statistics Using R **3 credit hours**

- PSY 6580 - Multivariate Data Analysis **3 credit hours** OR
- PSY 7580 - Multivariate Data Analysis **3 credit hours**

- PSY 6575 - Multilevel Analysis **3 credit hours** OR
- PSY 7575 - Multilevel Analysis **3 credit hours**

- PSY 6490 - Practicum: Quantitative Psychology **3 or 6 credit hours (6 credit hours)**

Electives (6 hours)

Students must take 6 elective credits in addition to required courses. The courses may be in psychology or related areas with the permission of the academic advisor.

Psychology

PSY 5030 - Psychology of Sensation and Perception
3 credit hours Prerequisite: PSY 1410. Modern theories of perception as they relate to knowledge of the external world through perceptual acquaintance. Philosophy of perception, history of sensory psychology, physiological mechanisms of perception, and ecological determinants of perceptual capabilities.

PSY 5050 - Applied Psychopharmacology
3 credit hours Reviews current information on major categories of psychoactive drugs used to treat mental disorders and drugs of abuse including mechanisms of action, therapeutic uses, and legal aspects.

PSY 5060 - Sport Psychology
3 credit hours Prerequisite: PSY 1410 or consent of instructor. (Same as ATHC 5060.) Application of psychological principles, motivational research, and social/psychological findings to the arena of sports. Theory and application of performance enhancement and teamwork in sports.

PSY 5080 - Advanced Research Methods
3 credit hours Prerequisite: PSY 3070. Provides hands-on advanced psychological research experience. Students evaluate and critique their own and others' research projects. Research teams design, conduct, analyze, and present advanced experimental study and write final APA-style research reports of their projects. Thesis proposal draft also written.

PSY 5120 - Psychology of Criminal Behavior
3 credit hours Survey of theory and research pertaining to criminal behavior, covering topics such as mental illness and crime, criminal homicide, assault, and sex offenses.

PSY 5130 - Laboratory in Psychology of Sensation and Perception
1 credit hours

PSY 5150 - Laboratory in Behavioral Neuroscience
1 credit hours

PSY 5180 - Laboratory in Learning Theories
1 credit hours

PSY 5210 - Adolescent Development
3 credit hours Prerequisite: PSY 2300 recommended but not required. Overview of cognitive, physical, and socioemotional development during adolescence, as well as the contexts of development.

PSY 5220 - Correctional Psychology
3 credit hours Law enforcement, delinquency, and criminal psychology, including psychological evaluation, classification, therapy, and rehabilitation. Special classifications. Field problems. Preventive implications.

PSY 5230 - Abnormal Psychology
3 credit hours Patterns of maladaptive behavior, including anxiety, depression, schizophrenia, antisocial behavior, and mental retardation.

PSY 5240 - Behavioral Neuroscience
3 credit hours The role of the brain in those areas which are typically considered by psychology, such as sensory and motor functions, motivation, higher mental functions, and mental disorders.

PSY 5260 - Introduction to Psychological Testing
3 credit hours Modern practices in test construction, selection, and application to classroom and guidance situations. (Student required to participate as principal and subject in administration, scoring, profiling, and in making predictions based on test results.)

PSY 5290 - Compensation System Design and Administration
3 credit hours Design and management of compensation systems including job evaluation, salary market data, pay for performance, legal issues, benefits, and practical applications.

PSY 5320 - Introduction to Industrial and Organizational Psychology
3 credit hours Survey of the applications of psychology to business and Industry. Topics will include applied research methods, employee selection, performance appraisal, training, leadership, motivation, work environment, job design, safety, and work stress.

PSY 5340 - Human Factors Psychology
3 credit hours Prerequisite: PSY 3320/PSY 5320 or consent of instructor. The process of designing for human use. Considers individual differences, visual, auditory, and tactile displays, anthropometry,

illumination, noise, humans in motion, and space and environmental studies.

PSY 5380 - Group Dynamics
3 credit hours Functioning of groups. Includes development of group structure, group conflict, cohesion, social influence, leadership, group productivity, group decision making, and growth groups.

PSY 5390 - Persuasion
3 credit hours Survey and analysis of theory and research on interpersonal influence. Applications of findings to various areas of human experience.

PSY 5430 - Ethical Conduct in Behavior Analysis
3 credit hours Prerequisite: Permission of instructor. Ethical practice and professional roles of behavior analysts.

PSY 5440 - Social Psychology of Close Relationships
3 credit hours Prerequisites: PSY 1410 and 2210. Theoretical and empirical issues in the scientific study of adult, close relationships from a social psychological perspective: initial attraction, relationship formation and maintenance, and dissolution. (Not a course in the broad area of marriage and the family; See CDFS 3320 Family Relationships and SOC 2500 Marriage and Family.)

PSY 5460 - Psychology of Happiness and Well-Being
3 credit hours Prerequisite: PSY 1410; PSY 2210 and PSY 3230 recommended. Introduces theories and research in psychology that examine topics relevant to the nature of happiness and psychological well-being. Topics covered will include happiness, life satisfaction, creativity, wellness, love, self-actualization, wisdom, as well as a number of others-topics recently discussed under the heading of "positive psychology."

PSY 5470 - Theories of Counseling
3 credit hours Integration of the major theories of counseling and psychotherapy and their application.

PSY 5480 - Learning Theories
3 credit hours Research and experiments in learning and the related growth of the major theories of learning with emphasis on classical and instrumental conditioning and related topics.

PSY 5490 - Operant Conditioning
3 credit hours Prerequisite: PSY 1410. Philosophy of B.F. Skinner's behaviorism explored in his own writings and those of his followers and critics. Current applications of behaviorism in all areas of psychology (child, marriage and family, animal conditioning, mental health, addictions, etc.) also examined.

PSY 5600 - Psychosexual Adjustment
3 credit hours The integration of psychological, social, behavioral, and biological components of the human sexual experience. Examines research, sexual development, attitudes and behaviors, variances and dysfunctions, and strategies for intervention.

PSY 5610 - Adult Development and Aging
3 credit hours Prerequisite: PSY 1410 and PSY 2300 recommended but not required. A survey of the research on adult development. Examines the physical, intellectual, social, vocational, and personality changes during the adult years.

PSY 5620 - Psychology of Women
3 credit hours Psychological impact of the culture on women's attitudes, roles, aspirations, problems, and personality development.

PSY 5630 - Death and Dying
3 credit hours An experiential course covering the folklore of thanatology, the funeral industry, handling grief, counseling the bereaved, the hospice concept. Objectives include an attempt to view death with equanimity and personal growth through confronting death.

PSY 5650 - Health Psychology
3 credit hours Prerequisite: PSY 1410. Focuses on the relationship between psychological factors and health and the application of psychological principles to the enhancement of health and prevention and treatment of illness.

PSY 5660 - Psychology Seminar: Industrial-Social
1 credit hours Representative and integrative study of scientific journals of the field. May be taken for total of three credits.

PSY 5670 - Psychology Seminar: Clinical-Personality
1 credit hours Representative and integrative study of scientific journals of the field. May be taken for total of three credits.

PSY 5680 - Psychology Seminar: General-Experimental
1 credit hours Representative and integrative study of scientific journals of the field. May be taken for total of three credits.

PSY 5700 - History and Systems of Psychology
3 credit hours A survey of the history and intensive coverage of current systems of psychology.

PSY 5720 - Multicultural Perspectives in Psychology and Education
3 credit hours Theories and research relative to the education of multi-ethnic/racial minorities. Relation of culture and socialization to learning styles, assessment practices, and counseling considerations.

PSY 5740 - Apprenticeship: Child
1 to 3 credit hours Supervised practical experience utilizing psychological principles and tools in an established organization.

PSY 5750 - Apprenticeship: Pre-Clinical
1 to 3 credit hours Supervised practical experience utilizing psychological principles and tools related to clinical psychology in an established organization.

PSY 5760 - Apprenticeship: Adolescent
1 to 3 credit hours Supervised practical experience utilizing psychological principles and tools in an established organization.

PSY 5780 - Human Neuropsychology
3 credit hours Prerequisite: PSY 5240 or consent of instructor. Organization and function of specific brain areas and the behavioral deficits and changes resulting from focal and diffuse brain damage.

PSY 5820 - Psychology of Language
3 credit hours Prerequisite: PSY 1410. A cognitive approach to how people learn and use language to communicate. Covers basic and applied psycholinguistics (including language perception, language production, syntax, semantics, discourse comprehension, and language development).

PSY 5830 - Occupational Health Psychology
3 credit hours Prerequisites: PSY 1410 and PSY 3020 or equivalent statistics course. Focuses on identifying and improving the key health, safety, and well-being issues that employees face.

PSY 6000 - Orientation to School Psychology
1 credit hours Introduction to a career as a school psychologist. Uses appropriate materials from the National Association of School Psychologists as well as relevant court decisions and legislative acts to orient students to school psychology.

PSY 6010 - Clinical Interventions
3 credit hours Prerequisites: Admission to the clinical program or permission of instructor; PSY 6510 and PSY 6801. A supervised experience in which the student learns how to apply techniques of clinical interviewing for the purpose of developing, implementing, and evaluating treatment plans for clients. Liability insurance required prior to enrollment.

PSY 6020 - Theories of Personality
3 credit hours Examines traditional schools of personality theory and current developments within each.

PSY 6030 - Current Topics in Personality
3 credit hours Examines current research findings on personality traits and personality-related processes.

PSY 6040 - Topics in Industrial and Organizational Psychology
3 credit hours Focus on practical aspects of functioning as a professional in the field. Current issues, recent developments, and less-traditional relevant areas.

PSY 6050 - Psychological Testing
3 credit hours Prerequisite: PSY 3020 or equivalent. Modern practices in test construction, selection, and application; legal guidelines, reliability, and validity. Intelligence, abilities, interests, attitudes, values, and personality testing. Students required to participate as examiners and subjects in administering, scoring, profiling, and in making predictions based on test results.

PSY 6060 - School Psychology: Ethics and Practice
3 credit hours An introduction with particular emphasis on the ethical perspective. Adaptive instruction of behavior measures included, as are observations of classrooms and teacher interviews.

PSY 6065 - Introduction to School-Based Mental Health Services
3 credit hours School psychologist's role as a mental health service provider with both a practical and

theoretical focus. Basic helping and interviewing skills.

PSY 6070 - Advanced Industrial Organizational Training and Development
3 credit hours Prerequisite: PSY 3020 or equivalent. Theory and methodology used in the training and development of human resources in organizations: needs assessment, program development, program evaluation, and legal and special issues in training and development.

PSY 6080 - Interventions with Children and Adolescents
3 credit hours Prerequisite: PSY 5250 or PSY 6400 or permission of instructor. Theoretical and practical issues related to interventions with children and adolescents exhibiting behavioral and emotional problems. Intervention strategies for specific problems. Experience designing and evaluating intervention plans. Legal, ethical, and practical issues.

PSY 6085 - Pre-Internship: Industrial/Organizational Psychology
1 credit hours Prerequisite: Admission to program. Expectations, requirements, and procedures involved in a practicum in the Industrial/Organizational Psychology program. Encourages students to assess career goals and helps facilitate selection of a practicum that moves toward exploring and meeting those career goals.

PSY 6090 - Internship: Industrial/Organizational Psychology
3 credit hours Prerequisite: Consent of instructor. Supervised experience in industry, business, or government using psychological principles at a professional, applied level.

PSY 6100 - Intellectual Assessment
3 credit hours Corequisite: PSY 6101; prerequisite: PSY 4260/PSY 5260 or PSY 6050. Practical didactic instruction in theory and practice of cognitive assessment. Practical supervised experience in rapport, administration, scoring, and interpretation of individual intelligence tests for all age levels. Liability insurance required.

PSY 6101 - Laboratory in Intellectual Assessment
1 credit hours Corequisite: PSY 6100. Skill development in completing intellectual assessments, calculating scores, and conducting conferences in a laboratory setting.

PSY 6102 - Theory of Health Education and Behavior
3 credit hours (Same as HLTH 6102.) Links behavioral change theory to the research and practice of interventions in health behaviors. Application of the theoretical constructs linked to design, implementation, and evaluation of individual and group behavioral change programs.

PSY 6105 - Psychoeducational Assessment of Preschool Children
3 credit hours Prerequisite: PSY 6100. Instruction in theory and practice relevant to the assessment of preschool age children's cognitive, social, and emotional functioning. Field experience and liability insurance required.

PSY 6120 - Developmental Psychology: Child
3 credit hours Reviews the major areas of child development. These areas include cognitive, emotional, and social development. Primary attention will be devoted to the period of infancy through early adolescence. Covers both developmental theory and research.

PSY 6130 - Developmental Psychology: Adolescent
3 credit hours Survey of research on adolescence from a biopsychosocial perspective. Student observation and study of developing adolescents from cognitive, biological, social, and psychological frameworks.

PSY 6140 - Practicum: School Psychology
3 credit hours Prerequisite: 15 semester hours of related graduate credits, including PSY 6060, PSY 6080, PSY 6100, PSY 6750, and PSY 6770. Supervised assessment of learning and adjustment problems with follow-up parent, teacher, and administrator conferences. Practicum experience includes 90 hours of supervised work with a practicing, certified, full-time school psychologist. At least 50 percent of the practicum placement shall be in a school setting. Liability insurance required prior to enrollment.

PSY 6170 - Group Counseling and Psychotherapy
3 credit hours Prerequisites: PSY 5470 or PSY 6020; PSY 6260 or PSY 6010; permission of instructor. Corequisite: PSY 6180. Group process, ethics, and techniques. Application of counseling theory, group procedures, sociometrics, and group dynamics to interpersonal relations, mental health,

school, and industrial settings. Supervised experience. Liability insurance required prior to enrollment.

PSY 6180 - Laboratory in Group Counseling and Psychotherapy
1 credit hours Taken in conjunction with PSY 6170. Students will experience group process as members of a growth group during the first half of the semester and will demonstrate group skills as leaders of group session(s) during the second half of the semester.

PSY 6190 - Advanced Cognitive Psychology
3 credit hours Topic-oriented overview of cognitive psychology. Models of attention, perception, memory, language, reasoning, problem solving, and decision making. Issues in cognitive development and cognitive neuropsychology.

PSY 6210 - Advanced Psychometrics
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Classical test theory and item response theory. Model, assumptions, and problems of classical test theory. Mathematical modeling, parameter estimating, and adaptive testing procedures using item response theory. Both theories utilized for test construction.

PSY 6250 - Objective Personality Assessment
3 credit hours Prerequisites: PSY 4260/PSY 5260 or PSY 6050; PSY 6100. Practical supervised experience in objective measurement and analysis of key variables of personality, both for normative and specific diverse populations. Emphasis on MMPI. Liability insurance required prior to enrollment.

PSY 6280 - Psychological Statistics: Regression
3 credit hours Prerequisite: PSY 3020 or equivalent or admission to Psychology graduate program. Corequisite: PSY 6281. Review of basic statistics; various correlation coefficients; multiple and partial correlation; simple and multiple regression. Laboratory included.

PSY 6281 - Psychological Statistics: Regression Lab
0 credit hours Corequisite: PSY 6280.

PSY 6290 - Psychological Statistics: ANOVA
3 credit hours Prerequisite: PSY 3020 or equivalent or admission to Psychology graduate program. Corequisite: PSY 6291. Review of basic statistics. Scientific quantification, research design, and statistical analysis from the perspective of analysis of variance: one-way, factorial, repeated measures, and mixed designs. Laboratory included.

PSY 6291 - Psychological Statistics: ANOVA Lab
0 credit hours Corequisite: PSY 6290.

PSY 6300 - Literature Review and Reading in Psychology: Industrial and Organizational
2 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6310 - Independent Research in Psychology: Industrial and Organizational
1 to 9 credit hours Prerequisite: Permission of instructor. Individualized empirical research and library research approved by the instructor. (1-3 credits applicable to degree)

PSY 6320 - Performance Appraisal and Job Analysis
3 credit hours Covers the theory, techniques, current research, legal issues, and reliability and validity concerns associated with the practices of: job analysis, competency modeling, performance appraisals, and developing performance management systems.

PSY 6330 - Professional Issues in Industrial and Organizational Psychology
1 credit hours Survey of issues related to professional ethics, relevant legislation, professional affiliations, professional identity, and professional responsibilities.

PSY 6340 - Behavioral Medicine: Theory and Application
3 credit hours Prerequisite: Consent of instructor. Review theory, methodology, and application of behavioral medicine. Includes behavioral science issues in health and applications of this information to diagnosis, prevention, treatment, and rehabilitation of health problems for which "life-stress" factors predominate. See PSY 6350.

PSY 6350 - Laboratory in Behavioral Medicine
1 credit hours Prerequisite: Consent of instructor.

PSY 6360 - Organizational Change and Development
3 credit hours Prerequisite: PSY 6450 or permission of instructor. Analysis of theory and practice of organizational change and development, process of change, organizational development (OD) interventions, and evaluation and research of OD effectiveness.

PSY 6365 - Organizational Surveys and Employee Attitudes and Motivation
3 credit hours Prerequisite: PSY 6450. Special topics in employee attitudes and motivation and the measurement of employee attitudes through the use of organizational surveys. Develops skills in survey techniques and includes practical experience with surveys.

PSY 6380 - Work Group Effectiveness
3 credit hours Prerequisite: PSY 5380, PSY 6450, or permission of instructor. Analysis of factors leading to effective work groups. Topics covered include task effects on performance, group composition, leadership, group processes, and team building.

PSY 6390 - Independent Research in Psychology: Clinical
1 to 9 credit hours Prerequisite: Permission of instructor. Individualized empirical research and library research approved by the instructor. (1-3 credits applicable to degree)

PSY 6400 - Psychological Disorders of Children
3 credit hours Current research and theory of behavioral, cognitive, and emotional disorders in childhood and adolescence.

PSY 6410 - Development Across the Lifespan
3 credit hours Theories and characteristics of human development covering the lifespan.

PSY 6420 - Advanced Personnel Selection and Placement
3 credit hours Prerequisites: PSY 5260 or PSY 6050 and preferably PSY 6280. Employee selection decision making. Considers individual differences, recruitment, selection tools, measurement issues, validation procedures, and legal constraints.

PSY 6430 - Internship: Behavior Modification
1 to 4 credit hours Prerequisites: 30 semester hours of psychology including PSY 4400, PSY 5480, and PSY 5430. Supervised internship in an applied behavioral setting. Liability insurance required prior to enrollment. May be repeated; enrollment must be continuous.

PSY 6440 - Advanced Applied Behavioral Analysis
3 credit hours Prerequisite: PSY 4400 or permission of instructor. Intensive presentation of methods used in behavioral assessment and interventions. Application of various behavioral techniques.

PSY 6450 - Advanced Organizational Psychology
3 credit hours Review of theory and empirical research in organizational psychology. Students will apply theory and research findings to understand and explain work behavior at the individual, group, and organizational levels and will use this knowledge to solve organizational problems.

PSY 6460 - Factor Analysis and Related Methods
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Surveys each of the major factor analysis techniques and related latent trait theory with main focus on application. Nature, power, procedure, computer programming, interpretation, and limitations of each technique.

PSY 6480 - Advanced Topics in Quantitative Psychology
3 credit hours Prerequisite: PSY 6280 or equivalent. Advanced topics in quantitative psychology. Focus on current topics, recent issues, and less traditional areas of quantitative psychology. Relevant computer programs. May be repeated for a total of six credits.

PSY 6490 - Practicum: Quantitative Psychology
3 or 6 credit hours Prerequisites: 24 credit hours of psychology including PSY 6050, PSY 6210, PSY 6280, PSY 6290, PSY 6460, PSY 6550, PSY 6560, PSY 6580, PSY 6585, or consent of the instructor. Supervised experience in statistical consultation for social and behavioral sciences. May be repeated for a total of six credits.

PSY 6500 - Behavioral Methodology
3 credit hours Techniques for design and evaluation of clinical treatment and research. Includes single subject and group designs. Emphasis on direct observation and data collection procedures, reliability, social validity, and generalization.

PSY 6510 - Psychopathology
3 credit hours Prerequisite: PSY 3230/PSY 5230. Extensive examination of the disorders included in the

current diagnostic manual. Emphasis on adult disorders. Objectives are to enhance understanding of psychopathology and to develop minimal competence in diagnosing.

PSY 6520 - Psychopharmacology
3 credit hours Biochemical, neurophysiological, and neuroanatomical basis; emphasis on drugs used in investigating and treating psychological disorders.

PSY 6530 - The Psychology of Reading and Reading Development
3 credit hours Overview of the cognitive processes involved in reading. The structure of both oral and written language; cognitive mechanisms in reading; language development and the acquisition of reading skills; developmental and acquired disorders of language and reading.

PSY 6550 - Structural Equation Modeling
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Structural equation modeling. Review of correlation, multiple regression and path analysis. Conceptual review of measurement models. Model specification, estimation, goodness of fit, and power of structural equation models. Relevant computer programs.

PSY 6560 - Computer-Based Statistical Packages
3 credit hours Prerequisite: PSY 3020 or equivalent. History, principles, and skills of data analysis, using major statistical packages.

PSY 6565 - Behavioral Statistics Using R
3 credit hours Prerequisite: PSY 4070 or PSY 6280/PSY 7280. Use of the R programming language to solve data management issues and to conduct basic and advanced statistical analyses.

PSY 6570 - Psychological Research Methods in Human Resource Management
3 credit hours Prerequisite: PSY 6280 or permission of instructor. Theory and appropriate methodology for conducting research relevant to human resource practices in organizations. Applied psychometric theory and quasi-experimental design.

PSY 6575 - Multilevel Analysis
3 credit hours Prerequisite: PSY 4070 or PSY 6280/PSY 7280. Use of multilevel modeling techniques to analyze data with complex data structure.

PSY 6580 - Multivariate Data Analysis
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Surveys each of the major multivariate data analysis techniques, with main focus on their application. Nature, power, procedure, computer programming, interpretation, and limitations of each.

PSY 6585 - Test Construction and Validation
3 credit hours Prerequisite: PSY 6280. Surveys principles in item and test construction. Actual development of items and tests in the student's own field and validation of the items and tests through both classical test theory and item response theory.

PSY 6590 - Literature Review and Reading in Psychology: General and Experimental
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6600 - Independent Research in Psychology: General and Experimental
1 to 9 credit hours Prerequisite: Permission of instructor. Individualized empirical research and library research approved by the instructor. (1-9 credits applicable to degree)

PSY 6615 - Basic and Applied Research Methods in Psychology
3 credit hours Survey of experimental and quasi-experimental research designs employed in mental health fields. Theoretical and practical knowledge of various research designs and data analysis procedures explored through class lectures and lab assignments. Offers preparation for those training to become mental health practitioners to understand and critically evaluate psychological research.

PSY 6620 - Independent Study: Industrial and Organizational Psychology
1 to 3 credit hours Prerequisite: Permission of instructor. Individualized library or empirical research project approved by instructor. A maximum of three credits will apply to a master's degree.

PSY 6630 - Literature Review and Reading in Psychology: Clinical
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from

individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

PSY 6645 - Foundations of Health Psychology
3 credit hours Introduction to principles, practices, theories, and research in health psychology. Study of factors influencing psychological and physical health. Involves a biopsychosocial approach to research in illness and behavioral health.

PSY 6650 - Positive Psychology
3 credit hours Introduction to theories and research in positive psychology. Topics relevant to the nature of psychological well-being: research on happiness, life satisfaction, creativity, wellness, self-actualization, wisdom, plus applications in a number of areas.

PSY 6655 - Field Study in Health Psychology
1 credit hours Prerequisite: 9 hours of graduate health psychology courses. Students will be required to work in an applied setting under the supervision of a health psychology research professional. May be repeated for a total of 3 credit hours. S/U grading.

PSY 6660 - Literature Review and Reading in Psychology: Quantitative
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6661 - Program Evaluation
3 credit hours Methods and issues in program evaluation. Topics include evaluation methods, proposal construction, and presentation techniques.

PSY 6670 - Literature Review and Reading in Psychology: Behavioral Neuroscience
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6680 - Literature Review and Reading in Psychology: Cognitive
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6690 - Professional Issues and Roles
3 credit hours Systematic survey of ethical and legal requirements for psychological practice. Examines critical issues facing psychology and roles of psychologists.

PSY 6700 - Literature Review and Reading in Psychology: Developmental
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6720 - Literature Review and Reading in Psychology: Learning
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6730 - Literature Review and Reading in Psychology: Personality
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6740 - Literature Review and Reading in Psychology: Reading
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6750 - Psychology and Assessment of Learning Disabilities
3 credit hours Prerequisite: PSY 6100; corequisite: PSY 6760. Characteristics and biological bases of learning disabilities. Assessment methods including normative measures and CBMs, RTI, evidence-based interventions, as well as consultation strategies

related to working with children with learning disabilities.

PSY 6760 - Educational Assessment
1 credit hours Prerequisite: PSY 6010; corequisite: PSY 6750. Skills in conducting educational assessment for completing evaluations of children suspected of having learning disabilities. Liability insurance required prior to enrollment.

PSY 6770 - Assessment and Therapeutic Interventions for Children's Emotional Problems
3 credit hours Prerequisites: PSY 6100 and either PSY 5250 or PSY 6400. Personality and behavioral assessment with children. Linking assessment and diagnosis to therapeutic intervention. Developing therapeutic relationships with children.

PSY 6780 - Clinical Neuropsychology
3 credit hours Prerequisites: PSY 5780, PSY 6100, and PSY 6250 or consent of instructor. Review of human neuroanatomy and neurophysiology. Administration of representative neuropsychological test batteries, especially the Halstead-Reitan Neuropsychological Test Battery. Applied experience with clinical population. Liability insurance required prior to enrollment.

PSY 6785 - Principles of Behavior Analysis
3 credit hours Reinforcement theory and practice in applied settings with an emphasis on basic and advanced issues and best practices in behavioral control using reinforcers, punishers, discrimination, avoidance, shaping of new behaviors, chaining, contingencies, maintenance, and transfer. Special topics include language learning and training and the moral and legal controls in behavioral analysis.

PSY 6790 - Literature Review and Reading in Psychology: Sensation and Perception
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6801 - Interviewing and Intervention
3 credit hours Interview and intervention techniques common to most psychological assessment procedures and therapies: rapport-building, interviewing skills, management of dangerous or suicidal clients, consultation, and referrals.

PSY 6810 - Literature Review and Reading in Psychology: Social
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6820 - Family Therapy: Evaluation and Treatment Planning
3 credit hours Examination of evaluation and intervention procedures of major models of family therapy. Emphasis on ethical issues for practitioners of family therapy.

PSY 6841 - Theories of Individual Psychotherapy
3 credit hours Prerequisite: PSY 6801. Intensive presentation of theory and methods used in psychotherapy. Evaluation of standard of care and treatment effectiveness.

PSY 6850 - Field Practicum (Clinical)
3 credit hours Prerequisites: Admission to the clinical program or permission of the instructor; 24 hours including PSY 6010, PSY 6100, PSY 6101, PSY 6250, PSY 6510, and PSY 6690. Supervised clinical training in a community mental health agency. Supervision by a licensed psychologist at the agency. 300 clock hours for 3 credit hours. Liability insurance required prior to enrollment.

PSY 6851 - Assessment Field Practicum (Clinical)
3 credit hours Prerequisites: Admission to the clinical master's program (or permission of instructor) and successful completion of clinical master's program core coursework. Supervised clinical training in psychological assessment and diagnostics in a community mental health or related agency. Supervision by a licensed psychologist at the agency required and provided. Liability insurance required prior to enrollment.

PSY 6860 - Field Practicum (Clinical)
3 credit hours Prerequisite: PSY 6850. Must be taken in semester immediately following PSY 6850. Continuation of supervised clinical training in a community mental health agency. Supervision by a licensed psychologist at the agency. 300 clock hours for 3 credit hours. Liability insurance required prior to enrollment.

PSY 6870 - Field Practicum (Clinical)
3 credit hours Prerequisites: Admission to the clinical program or permission of the instructor; 24 hours including PSY 6510, PSY 6100, PSY 6250, PSY 6010, 6840, and PSY 6690. Supervised clinical training in a community mental health agency. Supervision by a licensed psychologist at the agency. 300 clock hours for 3 credit hours. Liability insurance required prior to enrollment.

PSY 6875 - Practicum: Consultation/Collaboration in School Psychology
3 credit hours Prerequisite: PSY 6750 and PSY 6760. Field-based training in the knowledge and skills necessary for school psychologists to successfully serve as consultants in school-based settings. Liability insurance required prior to enrollment.

PSY 6880 - Independent Study in School Psychology
1 credit hours

PSY 6940 - Independent Research in Psychology: School
1 to 9 credit hours Prerequisite: Permission of instructor. Individualized empirical research and library research approved by the instructor. (1-3 credits applicable to degree)

PSY 6950 - Literature Review and Reading in Psychology: School
1 to 3 credit hours Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.

PSY 6960 - Internship: School Psychology
1 to 4 credit hours Prerequisites: 30 semester hours of psychology including PSY 6060, PSY 6100, PSY 6140, and PSY 6770; approved thesis proposal. Minimum of 720 hours supervised internship, at least half in a school system. Not acceptable as Ed.S. internship. Liability insurance required prior to enrollment. May be repeated.

PSY 6970 - Independent Study in School Psychology: Learning
1 credit hours Competencies-oriented individualized study.

PSY 6980 - Independent Study in School Psychology: Fieldwork
1 credit hours Competencies-oriented individualized study. Learning competencies-oriented field experience. Forty-five hours of work as a school psychologist in training. Course may be repeated up to three times for credit.

PSY 6990 - Independent Study in School Psychology: Assessment and Consultation
1 credit hours Competencies-oriented individualized study.

PSY 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

PSY 7080 - Practicum: Advanced Interventions with Children
3 credit hours Prerequisite: PSY 6080. Corequisite: PSY 6140. Theoretical and practical issues related to school interventions with children exhibiting psychological and behavior problems. Advanced skills development in consultation with parents and teachers, psychotherapy with children, and brief, short-term family therapy.

PSY 7100 - Multicultural and Social Bases for Assessment and Intervention Practices
3 credit hours Prerequisite: PSY 6100. Theoretical and practical issues related to appropriate practices in assessment, diagnosis, and therapeutic interventions for youth of diverse ethnic and cultural groups.

PSY 7190 - Advanced Cognitive Psychology
3 credit hours Topic-oriented overview of cognitive psychology. Models of attention, perception, memory, language, reasoning, problem solving, and decision making. Issues in cognitive development and cognitive neuropsychology.

PSY 7200 - School Neuropsychology
3 credit hours Prerequisites: PSY 6100, PSY 6750, PSY 6770. Prerequisite/corequisite: PSY 6400. Overview of the principles of neuropsychology as applied within the school population. Biological and

neurological basis of behaviors and disorders in the school setting and means of intervention.

PSY 7210 - Advanced Psychometrics
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Classical test theory and item response theory. Model, assumptions, and problems of classical test theory. Mathematical modeling, parameter estimating, and adaptive testing procedures using item response theory. Both theories utilized for test construction.

PSY 7280 - Psychological Statistics: Regression
3 credit hours Prerequisite: PSY 3020 or equivalent or admission to Psychology graduate program. Corequisite: PSY 7281. Survey of theoretical and practical aspects of multiple regression as typically used by psychologists. Simple and multiple regression through model comparison approach in the general linear model paradigm. Laboratory included.

PSY 7281 - Psychological Statistics: Regression Lab
0 credit hours Corequisite: PSY 7280.

PSY 7290 - Psychological Statistics: ANOVA
3 credit hours Prerequisite: PSY 3020 or equivalent or admission to Psychology graduate program. Corequisite: PSY 7291. Review of basic statistics. Scientific quantification, research design, and statistical analysis from the perspective of analysis of variance: one-way, factorial, repeated measures, and mixed designs. Laboratory included.

PSY 7291 - Psychological Statistics: ANOVA Lab
0 credit hours Corequisite: PSY 7290.

PSY 7460 - Factor Analysis and Related Methods
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Surveys each of the major factor analysis techniques and related latent theories with main focus on application. Nature, power, procedure, computer programming, interpretation, and limitations of each technique.

PSY 7520 - Assessment and Treatment of Addictions
3 credit hours Systematic analysis of the addictional phenomena with particular emphasis on dynamics and behavioral manifestations. Alcohol, street and prescription drugs, gambling, TV, religion, politics, and sex as aberrational forms of altering consciousness explored. Causation, clinical diagnostics, and treatment procedures as well as prevention are addressed in detail.

PSY 7530 - The Psychology of Reading and Reading Development
3 credit hours Overview of the cognitive processes involved in reading. The structure of both oral and written language; cognitive mechanisms in reading; language development and the acquisition of reading skills; developmental and acquired disorders of language and reading.

PSY 7550 - Structural Equation Modeling
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Structural equation modeling. Review of correlation, multiple regression, and path analysis. Conceptual review of measurement and structural (latent) models. Model specification, estimation, goodness of fit, and power of structural equation models. Relevant computer programs.

PSY 7565 - Behavioral Statistics Using R
3 credit hours Prerequisite: PSY 4070 or PSY 6280/PSY 7280. Use of the R programming language to solve data management issues and to conduct basic and advanced statistical analyses.

PSY 7575 - Multilevel Analysis
3 credit hours Prerequisite: PSY 4070 or PSY 6280 PSY 7280. Use of multilevel modeling techniques to analyze data with complex data structure.

PSY 7580 - Multivariate Data Analysis
3 credit hours Prerequisites: PSY 6280, HHP 6700, or equivalent. Surveys each of the major multivariate data analysis techniques, with main focus on their application. Nature, power, procedure, computer programming, interpretation, and limitations of each.

PSY 7585 - Test Construction and Validation
3 credit hours Prerequisite: PSY 6280. Surveys principles in item and test construction. Actual development of items and tests in the student's own field and validation of the items and tests through both classical test theory and item response theory.

PSY 7810 - Advanced Internship: School Psychology
3 to 6 credit hours Prerequisites: 60 semester hours of approved graduate classes and PSY 6140, PSY 6875, PSY 7080, and approved thesis proposal. Minimum of 1200 hours supervised internship, at least

half in a public school system. Liability insurance required prior to enrollment. May be repeated; enrollment must be continuous.

PSY 7999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Social Work

Cathy McElderry, Chair
www.mtsu.edu/socialwork/
The Social Work Department offers the Master of Social Work (M.S.W.) with a concentration in Advanced Generalist Social Work Practice. Applicants holding a B.S.W. from a program accredited by the Council on Social Work Education may be eligible for admission to advanced standing.

Social Work, Advanced Generalist Social Work Practice Concentration, M.S.W.

Vicki Harden
615-898-2510
Vicki.Harden@mtsu.edu
www.mtsu.edu/socialwork/

The purpose of the Master of Social Work program is to prepare students for advanced generalist social work practice with systems of all types and sizes in both rural and urban areas, to prepare knowledgeable and competent professionals, and to provide leadership in the development of social delivery services, especially public social services. The M.S.W. program is accredited by the Council on Social Work Education (CSWE).
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Candidates must be admitted to the graduate college of their home campus (MTSU, APSU, or TSU) and must also be admitted to the Mid-Tennessee Collaborative Master of Social Work program. Admission requirements include an earned undergraduate degree with a minimum GPA of 2.75. Applicants interested in obtaining advanced standing must have completed a Bachelor of Social Work degree from a CSWE-accredited program and attained a minimum cumulative GPA of 3.00 in their undergraduate coursework. Students who hold a baccalaureate degree from a social work program outside the United States must have their transcript reviewed by CSWE for a determination of equivalency.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the M.S.W. program is limited and granted for Fall entry only. Review of applications for Fall admission begins on February 1 of each year and continues until capacity is reached. Applicants are encouraged to submit all required documents as early as possible.
Applicant must

1. submit application with appropriate fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.
3. submit a supplementary application that requires the application form, the student contract, an essay, and three letters of recommendation from professionals who can address the applicant's interest in social work, potential for successfully completing a master's program, and potential for professional social work practice (available at www.mtsu.edu/programs/social-work-msw/docs/MTCMSWAPPAY.pdf.

Degree Requirements

The Master of Social Work in Social Work with a concentration in Advanced Generalist Social Work Practice requires completion of 60 semester hours.
Candidate must complete this non-thesis program with a capstone course culminating in a written comprehensive examination.

Curriculum: Social Work, Advanced Generalist Social Work Practice

The following illustrates the coursework requirements.

Foundation Courses (27 hours)

- SW 6000 - MSW Practice I **3 credit hours**
- SW 6010 - Human Behavior and the Social Environment **3 credit hours** (online)
- SW 6020 - Research I **3 credit hours**
- SW 6030 - Social Welfare Policy and Services **3 credit hours** (online)
- SW 6100 - MSW Practice II **3 credit hours**
- SW 6110 - Social Justice and Equity for Multicultural Populations **3 credit hours** (online)
- SW 6120 - Research II **3 credit hours**
- SW 6130 - Practicum IA **3 credit hours**
- SW 6140 - Practicum IB **3 credit hours**

Concentration Courses (24 hours)

- SW 6200 - Advanced Direct Practice with Individuals **3 credit hours**

- SW 6210 - Advanced Practice with Families **3 credit hours** ** OR
- SW 6220 - Advanced Group Practice **3 credit hours** **

- SW 6230 - Advanced Macro Practice **3 credit hours**
- SW 6240 - Social Policy Analysis **3 credit hours** (online)
- SW 6300 - Empirical Social Work Practice **4 credit hours**
- SW 6310 - Practicum IIA **4 credit hours**
- SW 6320 - Practicum IIB **4 credit hours**
  *****Either course meets requirement; the other one may be taken as an elective.***

Electives (6-9 hours)

- SW 5000 - Special Topics **3 credit hours**

- SW 6210 - Advanced Practice with Families **3 credit hours** OR
- SW 6220 - Advanced Group Practice **3 credit hours**

NOTE: ***9 credit hours of electives are required for the full program; 6 credit hours are required for the advanced standing program. Electives include children's mental health, trauma and recovery, neuroscience in social work, grant writing, domestic violence, school social work, child abuse and neglect treatment, community health, evidence-based substance abuse treatment, supervision in social work practice, military social work, child welfare, and aging issues and controversies.***

Program Notes

All M.S.W. students will be reviewed for candidacy by the social work faculty prior to beginning their second practicum. Students must obtain a favorable candidacy recommendation to remain in the program.

Social Work

SW 5000 - Special Topics
3 credit hours Prerequisites: Permission of department. Special topics in social work and social welfare. May be repeated for a maximum of 9 hours. online delivery

SW 6000 - MSW Practice I
3 credit hours Prerequisite: Admission to the M.S.W. program. A social work methods course designed to enable the student to understand and apply social work methods within the context of the generalist perspective with individuals and families.

SW 6010 - Human Behavior and the Social Environment
3 credit hours Prerequisite: Admission to the M.S.W. program. An introduction to the theories and knowledge of the human bio-psycho-social development including theories and knowledge about the range of social systems in which individuals live (families, groups, organizations, agencies, and communities).

SW 6020 - Research I
3 credit hours Prerequisite: Admission to the M.S.W. program. This is a basic research and statistical methods course utilizing research in general inquiry and practice evaluation in social work with the generalist perspective.

SW 6030 - Social Welfare Policy and Services
3 credit hours Prerequisite: Admission to the M.S.W. program. The historical development, philosophical orientation, and analysis of U.S. social welfare policy and services including the global context. online delivery

SW 6100 - MSW Practice II
3 credit hours Prerequisite: SW 6000 and SW 6010. A social work methods course designed to enable the student to understand and apply social work methods within the context of the generalist perspective with groups, agencies, and communities.

SW 6110 - Social Justice and Equity for Multicultural Populations
3 credit hours Prerequisite: SW 6010. An overview of the professional commitment of social work to oppressed peoples. online delivery

SW 6120 - Research II
3 credit hours Prerequisite: SW 6020. An advanced discussion of program evaluation strategies and single-system design issues. The student will conduct a research project.

SW 6130 - Practicum IA
3 credit hours Prerequisites: SW 6000, SW 6010, SW 6020, and SW 6030. May be taken concurrently with SW 6140. A 200-hour field practicum experience within the generalist perspective.

SW 6140 - Practicum IB
3 credit hours Prerequisites: SW 6000, SW 6010, SW 6020, and SW 6030. May be taken concurrently with SW 6130. A 200-hour field practicum experience within the generalist perspective.

SW 6200 - Advanced Direct Practice with Individuals
3 credit hours Prerequisites: Practicum IA (SW 6130) and IB (SW 6140) or advanced standing admission. An advanced social work methods course that prepares students for practice with individuals including client assessment, intervention, and evaluation.

SW 6210 - Advanced Practice with Families
3 credit hours Prerequisites: Practicum IA (SW 6130) and IB (SW 6140) or advanced standing admission. Advanced practice with families including client system assessment, intervention, and evaluation.

SW 6220 - Advanced Group Practice
3 credit hours Prerequisites: Practicum IA (SW 6130) and IB (SW 6140) or advanced standing admission. Advanced practice with groups including client system assessment, intervention, and evaluation.

SW 6230 - Advanced Macro Practice
3 credit hours Prerequisites: Practicum IA (SW 6130) and IB (SW 6140) or advanced standing admission. The advanced generalist practice social work course designed to enable the student to understand and apply social work methods at the advanced generalist level.

SW 6240 - Social Policy Analysis
3 credit hours Prerequisites: Practicum IA (SW 6130) and IB (SW 6140) or advanced standing

admission. A study of the design, implementation, and analysis of social policies and their impact on social work practice. online delivery

SW 6300 - Empirical Social Work Practice
4 credit hours Prerequisites: Advanced Direct Practice with Individuals (SW 6200) and Advanced Practice with Families (SW 6210), or Advanced Practice with Individuals (SW 6220) Advanced Macro Practice (SW 6230), and Social Policy Analysis (SW 6240). A seminar in the integration of theoretical perspectives and the application of research findings and empirical outcome evaluation techniques to advanced generalist social work practice.

SW 6310 - Practicum IIA
4 credit hours Prerequisites: Advanced Practice with Individuals (SW 6200) and Advanced Practice with Families (SW 6210) or Advanced Group Practice (SW 6220), Advanced Macro Practice (SW 6230), and Social Policy Analysis (SW 6240). May be taken concurrently with Practicum IIB (SW 6320). A 250-hour field practicum experience. Must be taken concurrently with Empirical Social Work Practice (SW 6300).

SW 6320 - Practicum IIB
4 credit hours Prerequisites: If taken concurrently with SW 6130, prerequisites are the same. If not taken concurrently, SW 6310 is the prerequisite. May be taken concurrently with Practicum IIA (SW 6310) and Empirical Social Work Practice (SW 6300).

SW 6400 - Independent Study
3 credit hours Prerequisites: Permission of department required. Independent study allows a student to develop more fully an area of his or her particular interest. Topics for intensive study are chosen in joint consultation between the student and the instructor.

SW 6410 - Aging Issues and Controversies
3 credit hours Prerequisite: Permission of department. An examination of the biological, psychological, and social issues affecting older adults. The field of gerontology is explored with special attention to current controversies in health care, independence, and social status with application of ethical theories to these problems.

SW 6420 - Adult Mental Health
3 credit hours Prerequisite: Permission of department. This course offers preparation for students for advanced generalist practice by integrating foundation-level knowledge of policy, research, HBSE, and practice with substantive knowledge from the field of mental health. This course provides the basics of DSM-V diagnosis, biopsychosocial assessment, and treatment planning. They will be exposed to the skills necessary to conduct strengths and competency-based assessments and interventions.

Jones College of Business

Business Administration, Concrete Industry Management Concentration, M.B.A.

S. Kim Sokoya, MBA Program Director
(615) 898-2352
Kim.Sokoya@mtsu.edu
Kelly Strong, Director
School of Concrete and Construction Management
(615) 898-2419
Kelly.Strong@mtsu.edu
The University offers a Master of Business Administration with a concentration in Concrete Industry Management degree which requires courses in accounting, economics, finance, information systems, management, marketing, and concrete industry management.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants to the M.B.A. program must submit official transcripts of all previous college work. (International transcript must have an official evaluation by a NACES member.) In addition to transcripts, applicants to the CIM concentration are also required to submit a current resume, a statement of purpose outlining career objectives, and three letters of recommendation addressing the qualification for advanced study in business and concrete industry management. Applicants may also be required to participate in an interview.
Admission to the Concrete Industry Management (CIM) concentration is limited to persons with significant experience in business in general and the concrete industry specifically. As such, the Graduate Management Admission Test (GMAT) will not be required of persons applying to this concentration. Admission is determined after a full review of all application materials and is not automatic for persons meeting the minimum required for admission to the M.B.A.
In addition to the requirements outlined above, international applications must submit proof of English language proficiency that meets the University requirement.
Once admitted, all students in the Concrete Industry Management concentration will optionally complete a series of prerequisite courses designed to assure an appropriate foundation for advanced study in business.

Degree Requirements

The Master of Business Administration with a concentration in Concrete Industry Management requires completion of 37 semester hours.

Curriculum: Business Administration, Concrete Industry Management

The following illustrates the coursework requirements.

Core Courses (25 hours)

- MBAA 6815 - Accounting Information for Managers **2 credit hours**
- MBAM 6825 - Leading Organizations **2 credit hours**
- MBAM 6875 - Supply Chain Operations **3 credit hours**
- MBAE 6865 - Economic Decisions for Managers **2 credit hours**
- MBAF 6845 - Managerial Finance **2 credit hours**
- MBAK 6895 - Marketing Strategy **2 credit hours**
- MBAI 6835 - IT Applications for Decision Making **2 credit hours**
- MBAI 6905 - Applied Business Analytics **3 credit hours**

- MBAM 6925 - Strategic Business Consulting **4 credit hours**

- MBAA 6885 - Decision Making in Accounting and Finance **3 credit hours** OR
- MBAF 6885 - Decision Making in Accounting and Finance **3 credit hours**

Concentration Courses (12 hours)

- CIM 6000 - Concrete Construction Sustainability **3 credit hours**
- CIM 6010 - Concrete Construction Troubleshooting **3 credit hours**
- CIM 6020 - Project Management in Concrete and Construction **3 credit hours**
- CIM 6030 - Concrete and Construction Costs and Controls **3 credit hours**

Program Notes

Students must meet the expectations of the University regarding adequate progress toward the degree. Specifically

1. students are expected to maintain a 3.00 grade point average for all graduate coursework;
2. students are expected to consistently enroll in and complete coursework in their area of study, making continuous progress as part of their cohort, toward attainment of the degree.

NOTE: Students may transfer up to six credit hours of approved graduate coursework from another AACSB-accredited institution.

Business Administration, Health Care Management Concentration, M.B.A.

S. Kim Sokoya, MBA Program Director
(615) 898-2352
Kim.Sokoya@mtsu.edu
The University offers a Master of Business Administration degree with a concentration in Health Care Management which requires courses in accounting, economics, finance, information systems, management, and marketing. Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Business Administration program requires the following:

1. an earned bachelor's degree from a regionally accredited college or university with a GPA of 2.75 or higher; and
2. a minimum Index Score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).

The GMAT/GRE requirement may be waived for applicants that meet any of the following conditions:

- an earned bachelor's degree from a regionally accredited college or university with GPA 3.0 or higher (International transcripts must have official evaluation from a NACES member.)
- an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial work experience (resume required)
- an earned graduate or professional degree from a regionally accredited college or university

Foundation Courses

The following foundation prerequisite courses or their equivalents are required before enrolling in core M.B.A. courses:

- ACTG 3000 - Survey of Accounting for General Business
- BIA 6000 - Quantitative Methods Survey
- FIN 3010 - Principles of Corporate Finance

Students may complete prerequisite courses after admission to the M.B.A. program if needed.
In addition to the requirements outlined above, international applicants must submit proof of English language proficiency that meets the University requirement.
NOTE: ***Students admitted into the MBA program who do not have a background in business education or those who think they may need some tutorial courses are advised to use any of the resources listed below. Please note that the program does not require prerequisite courses outside the listed foundation courses above (ACTG 3000, BIA 6000, and FIN 3010 or their equivalent).***
The following is a list of self-paced, online programs that can be helpful. Students who think they may need to refresh their knowledge in the functional areas of business such as marketing, management, economics, finance, accounting, statistics, or using Excel are advised to make use of any of the following resources before taking the core classes.

- www.linkedin.com/learning
- www.hbr.org/store/landing/course

It is the responsibility of the student to avail themselves of the resources listed above.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Priority deadlines for completed applications: Fall - June 1; Spring - October 1; Summer - April 1. Completed application packages received after the priority deadline will be evaluated based on the date received.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GMAT examination;
3. submit official transcripts of all previous college work;
4. submit a current resume.

Degree Requirements

The Master of Business Administration with a concentration in Health Care Management requires completion of 42 semester hours.
MBAM 6925 - Strategic Business Consulting, the capstone course, is taken in lieu of a comprehensive written examination for the M.B.A. This course should be taken during the student's last semester and after completing all other core courses in the curriculum.

Curriculum: Business Administration, Health Care Management

The following illustrates the coursework requirements.

Core Courses (30 hours)

- MBAA 6815 - Accounting Information for Managers **2 credit hours**
- MBAM 6825 - Leading Organizations **2 credit hours**
- MBAE 6865 - Economic Decisions for Managers **2 credit hours**
- MBAB 6805 - Professional Development Seminar: Introduction **1 credit hours**
- MBAF 6845 - Managerial Finance **2 credit hours**
- MBAK 6895 - Marketing Strategy **2 credit hours**
- MBAI 6835 - IT Applications for Decision Making **2 credit hours**

- MBAA 6885 - Decision Making in Accounting and Finance **3 credit hours** OR
- MBAF 6885 - Decision Making in Accounting and Finance **3 credit hours**

- MBAM 6875 - Supply Chain Operations **3 credit hours**
- MBAI 6905 - Applied Business Analytics **3 credit hours**

- MBAM 6915 - Integrated Marketing and Management Decision Making **3 credit hours** OR
- MBAK 6915 - Integrated Marketing and Management Decision Making **3 credit hours**

- MBAB 6807 - Professional Development Seminar Conclusion **1 credit hours**
- MBAM 6925 - Strategic Business Consulting **4 credit hours**

Concentration Courses (12 hours)

Required Courses (6 hours)

- MGMT 6250 - Health Care Resource Management **3 credit hours**
- MGMT 6780 - Health Care Management **3 credit hours**

Electives (6 hours)

- ACTG 6320 - Strategic Cost and Control in Healthcare **3 credit hours**
- ECON 6400 - Health Economics **3 credit hours**
- MKT 6900 - Health Care Marketing **3 credit hours**
- MGMT 6200 - Lean Project Management Principles **3 credit hours**
- MGMT 6450 - Health Care Quality and Accountability for Leaders **3 credit hours**
- MGMT 6760 - Continuous Improvement/Problem Solving **3 credit hours**

Program Notes

Core courses may not be satisfied by independent study.
A student who has had substantial undergraduate instruction in accounting, economics, finance, information systems, management, or marketing may be required, as determined by the director, to take an alternate 6000-level course in the same area of instruction in lieu of the required graduate course.
Students may transfer up to six credit hours of approved graduate coursework from another AACSB-accredited institution.

Business Administration, M.B.A.

S. Kim Sokoya, Program Director
(615) 898-2352
Kim.Sokoya@mtsu.edu
The University offers a Master of Business Administration degree which requires courses in accounting, economics, finance, information systems, management, and marketing.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Business Administration program requires the following:

1. an earned bachelor's degree from a regionally accredited college or university with a GPA of 2.75 or higher; and
2. a minimum Index Score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).

The GMAT/GRE requirement may be waived for applicants that meet any of the following conditions:

- an earned bachelor's degree from a regionally accredited college or university with GPA 3.0 or higher (International transcripts must have an official evaluation by a NACES member.)
- an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial work experience (resume required)
- an earned graduate or professional degree from a regionally accredited college or university

Foundation Courses

The following foundation prerequisite courses or their equivalents are required before enrolling in core M.B.A. courses:

- ACTG 3000 - Survey of Accounting for General Business
- BIA 6000 - Quantitative Methods Survey
- FIN 3010 - Principles of Corporate Finance

Students may complete prerequisite courses after admission to the M.B.A. program if needed.
In addition to the requirements outlined above, international applicants must submit proof of English language proficiency that meets the University requirement.
NOTE: ***Students admitted into the MBA program who do not have a background in business education or those who think they may need some tutorial courses are advised to use any of the resources listed below. Please note that the program does not require prerequisite courses outside the listed foundation courses above (ACTG 3000, BIA 6000, and FIN 3010 or their equivalent).***
The following is a list of self-paced, online programs that can be helpful. Students who think they may need to refresh their knowledge in the functional areas of business such as marketing, management, economics, finance, accounting, statistics, or using Excel are advised to make use of any of the following resources before taking the core classes.

- www.linkedin.com/learning
- www.hbr.org/store/landing/courses

It is the responsibility of the student to avail themselves of the resources listed above.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Priority deadlines for completed applications: Fall - June 1; Spring - October 1; Summer - April 1. Completed application packages received after the priority deadline will be evaluated based on the date received.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.

2. submit official scores on the GMAT or GRE examination;
3. submit official transcripts of all previous college work;
4. submit a current resume.

Degree Requirements

The Master of Business Administration requires completion of 36 semester hours.
MBAM 6925 - Strategic Business Consulting, the capstone course, is taken in lieu of a comprehensive written examination for the M.B.A. This course should be taken during the student's last semester and after completing all other courses in the curriculum with the exception of the elective courses.

Curriculum: Business Administration

The following illustrates the coursework requirements.

Core Courses (30 hours)

- MBAA 6815 - Accounting Information for Managers **2 credit hours**
- MBAM 6825 - Leading Organizations **2 credit hours**
- MBAE 6865 - Economic Decisions for Managers **2 credit hours**
- MBAB 6805 - Professional Development Seminar: Introduction **1 credit hours**
- MBAF 6845 - Managerial Finance **2 credit hours**
- MBAK 6895 - Marketing Strategy **2 credit hours**
- MBAI 6835 - IT Applications for Decision Making **2 credit hours**

- MBAA 6885 - Decision Making in Accounting and Finance **3 credit hours** OR
- MBAF 6885 - Decision Making in Accounting and Finance **3 credit hours**

- MBAM 6875 - Supply Chain Operations **3 credit hours**
- MBAI 6905 - Applied Business Analytics **3 credit hours**

- MBAK 6915 - Integrated Marketing and Management Decision Making **3 credit hours** OR
- MBAM 6915 - Integrated Marketing and Management Decision Making **3 credit hours**

- MBAB 6807 - Professional Development Seminar Conclusion **1 credit hours**
- MBAM 6925 - Strategic Business Consulting **4 credit hours**

Approved Electives (6 hours)

- Approved elective (6000 level) **6 credit hours**

NOTE: ***The elective course requirement can be satisfied if a student takes an approved graduate course, approved internship, or an approved study abroad course. The course taken to satisfy this elective requires prior approval of the associate dean for Graduate and Executive Education.***

Program Notes

Core courses may not be satisfied by independent study.
A student who has had substantial undergraduate instruction in accounting, economics, finance, information systems, management, or marketing may be required, as determined by the director, to take an alternate 6000-level course in the same area of instruction in lieu of the required graduate course.
Students may transfer up to six credit hours of approved graduate coursework from another AACSB-accredited institution.

Business Administration, M.B.A., ABM Pathway

S. Kim Sokoya, Program Director
(615) 898-2352
Kim.Sokoya@mtsu.edu
The Business Administration Program offers an Accelerated Bachelors to Masters Pathway in Business Administration, M.B.A., corresponding to the Business Administration, B.B.A.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Additional Requirements

Applicant must

- submit ABM MBA application;
- submit two letters of reference or reference forms from Jones College of Business faculty.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

Students must choose 6 credit hours from the chart below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

MTSU Undergraduate Course	MTSU Graduate Course	Credit Hours
MGMT 3750 - International Supply Chain Management	MBAM 6875 - Supply Chain Management	3
MGMT 3725 - Lean Project Management Principle	MGMT 6200 - Lean Project Management Principle	3
MGMT 3810 - Human Resource Management	MGMT 6680 - Seminar in Human Resource Management	3
MGMT 3640 - Managing Key Performance Indicators	MGMT 6700 - Supply Chain Key Performance Indicators	3
MGMT 3940 - Business Ethics	MGMT 6750 - Business Ethics	3
MGMT 3705 - Continuous Improvement/Problem Solving	MGMT 6760 - Continuous Improvement Problem Solving	3
MGMT 4730 - Global Comparative Management	MGMT 6770 - International Management	3

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Business Administration, M.B.A., Management ABM Pathway

S. Kim Sokoya, Program Director
(615) 898-2352
Kim.Sokoya@mtsu.edu
The Business Administration program offers an Accelerated Bachelors to Masters Pathway in Business Administration, M.B.A., corresponding to the Management, B.B.A.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Additional Requirements

Applicant must

- submit ABM MBA application;
- submit two letters of reference or reference forms from Jones College of Business faculty.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

Students must choose 6 credit hours from the chart below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

MTSU Undergraduate Course	MTSU Graduate Course	Credit Hours
MGMT 3750 - International Supply Chain Management	MBAM 6875 - Supply Chain Management	3
MGMT 3725 - Lean Project Management Principle	MGMT 6200 - Lean Project Management Principle	3
MGMT 3810 - Human Resource Management	MGMT 6680 - Seminar in Human Resource Management	3
MGMT 3640 - Managing Key Performance Indicators	MGMT 6700 - Supply Chain Key Performance Indicators	3
MGMT 3940 - Business Ethics	MGMT 6750 - Business Ethics	3
MGMT 3705 - Continuous Improvement/Problem Solving	MGMT 6760 - Continuous Improvement Problem Solving	3
MGMT 4730 - Global Comparative Management	MGMT 6770 - International Management	3

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a

bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Business Administration, Music Business, M.B.A.

S. Kim Sokoya, MBA Program Director
(615) 898-2352
Kim.Sokoya@mtsu.edu
The University offers a Master of Business Administration degree with a concentration in Music Business which requires courses in accounting, economics, finance, information systems, management, marketing, and recording industry.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements:

Admission to the Master of Business Administration program requires the following:

1. an earned bachelor's degree from a regionally accredited college or university with a GPA of 2.75 or higher; and
2. a minimum Index Score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).

The GMAT/GRE requirement may be waived for applicants that meet any of the following conditions:

- an earned bachelor's degree from a regionally accredited college or university with GPA 3.0 or higher (International transcripts must have an official evaluation by a NACES member.)
- an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial work experience (resume required)
- an earned graduate or professional degree from a regionally accredited college or university

Foundation Courses

The following foundation prerequisite courses or their equivalents are required before enrolling in core M.B.A. courses:

- ACTG 3000 - Survey of Accounting for General Business
- BIA 6000 - Quantitative Methods Survey
- FIN 3010 - Principles of Corporate Finance

Students may complete prerequisite courses after admission to the M.B.A. program if needed.
In addition to the requirements outlined above, international applicants must submit proof of English language proficiency that meets the University requirement.
NOTE: ***Students admitted into the MBA program who do not have a background in business education or those who think they may need some tutorial courses are advised to use any of the resources listed below. Please note that the program does not require prerequisite courses outside the listed foundation courses above (ACTG 3000, BIA 6000, and FIN 3010 or their equivalent).***
The following is a list of self-paced, online programs that can be helpful. Students who think they may need to refresh their knowledge in the functional areas of business such as marketing, management, economics, finance, accounting, statistics, or using Excel are advised to make use of any of the following resources before taking the core classes.

- www.linkedin/learning.com
- https://hbr.org/store/landing/courses

It is the responsibility of the student to avail themselves of the resources listed above.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Priority deadlines for completed applications: Fall - June 1; Spring - October 1; Summer - April 1. Completed application packages received after the priority deadline will be evaluated based on the date received.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit official scores on the GMAT examination;

3. submit official transcripts of all previous college work;
4. submit a current resume.

Degree Requirements

The Master of Business Administration with a concentration in Music Business requires completion of 42 semester hours.
MBAM 6925 - Strategic Business Consulting, the capstone course is taken in lieu of a comprehensive written examination for the M.B.A degree. This course should be taken during the student's last semester and after completing all other core courses in the curriculum.

Curriculum: Business Administration, Music Business

The following illustrates the coursework requirements.

Core Courses (30 hours)

- MBAA 6815 - Accounting Information for Managers **2 credit hours**
- MBAM 6825 - Leading Organizations **2 credit hours**
- MBAE 6865 - Economic Decisions for Managers **2 credit hours**
- MBAB 6805 - Professional Development Seminar: Introduction **1 credit hours**
- MBAF 6845 - Managerial Finance **2 credit hours**
- MBAK 6895 - Marketing Strategy **2 credit hours**
- MBAI 6835 - IT Applications for Decision Making **2 credit hours**

- MBAA 6885 - Decision Making in Accounting and Finance **3 credit hours** OR
- MBAF 6885 - Decision Making in Accounting and Finance **3 credit hours**

- MBAM 6875 - Supply Chain Operations **3 credit hours**
- MBAI 6905 - Applied Business Analytics **3 credit hours**

- MBAK 6915 - Integrated Marketing and Management Decision Making **3 credit hours** OR
- MBAM 6915 - Integrated Marketing and Management Decision Making **3 credit hours**

- MBAB 6807 - Professional Development Seminar Conclusion **1 credit hours**
- MBAM 6925 - Strategic Business Consulting **4 credit hours**

Concentration Courses (12 hours)

- MBAK 5640 - Entertainment Branding **3 credit hours**
- MRAT 6150 - Legal Rights of the Creative Individual **3 credit hours**
- RIM 6020 - The Music Industry: Revenues, Rights, and Professions **3 credit hours**
- RIM 6300 - Music Entrepreneurship and Strategic Planning for the Arts **3 credit hours**

Program Notes

Core courses may not be satisfied by independent study.
A student who has had substantial undergraduate instruction in accounting, economics, finance, information systems, management, or marketing may be required, as determined by the director, to take an alternative 6000-level course in the same area of instruction in lieu of the required graduate course.
Students may transfer up to six credit hours of approved graduate coursework from another AACSB-accredited institution.

MBA Business Administration

MBAB 6805 - Professional Development Seminar: Introduction
1 credit hours Current topics and issues focusing on developing managerial and leadership skills and preparing a professional/career development portfolio.

MBAB 6806 - Professional Development Seminar Intermediate
1 credit hours Current topics and issues focusing on development of soft skills and professionalism in the workplace for business professionals.

MBAB 6807 - Professional Development Seminar Conclusion
1 credit hours Prerequisites: MBAB 6805, MBAK 6915/MBAM 6915, MBAA 6885/MBAF 6885, MBAM 6875, and MBAI 6905. Current topics and issues focusing on development of soft skills and professionalism in the workplace for business professionals.

Accounting

Jeannie Harrington, Chair
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www.mtsu.edu/accounting
The Department of Accounting offers the Master of Accountancy (M.Acc.) and courses for the Master of Business Administration degree. The M.Acc. includes specializations in assurance and tax accounting. Certificates are also available in Assurance and Tax.
The accounting graduate director serves as advisor.

Accounting, M.Acc.

Audrey Scarlata, Program Director
(615) 898-2625
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The Department of Accounting offers a flexible Master of Accountancy (M.Acc.) degree program that develops students' decision making and communication skills and provides a path to professional accounting certifications. Please see the undergraduate catalog for undergraduate program information.

Admission Requirements

To be considered for admission to the Master of Accountancy program (see Admission to the College of Graduate Studies), a student must meet **ONE** of the following:

1. Student has an undergraduate accounting degree from an Association to Advance Collegiate Schools of Business (AACSB) accredited institution with an overall undergraduate GPA of 3.00.
2. Student has an overall composite score ≥ 950, calculated as (Cumulative GPA x 200) + GMAT, with a minimum GMAT of 400.
3. Student has an upper-division composite score ≥ 1,000, calculated as (Upper Division GPA x 200) + GMAT, with a minimum GMAT of 400.
4. International students must comply with the following provision: For undergraduate degrees from foreign institutions where a grade point average cannot be clearly established but where that work is thought to be equivalent to domestic grades of B or higher, admission eligibility may be determined by the GMAT score. A score of at least 450 is required for unconditional admission under such circumstances. Preparatory work taken at institutions with grading systems paralleling those of most U. S. institutions must conform to a B average.
5. Students without an undergraduate degree in Accounting may apply for admission to the Master of Accountancy program as long as they meet the requirements in (2) or (3) above. In addition, these students will be required to complete certain prerequisite undergraduate accounting courses including (but not limited to) Principles of Accounting I and II, Intermediate Accounting I and II, Cost Accounting, Introduction to Federal Income Tax, Auditing, Legal Environment of Management (Business Law), Survey of Economic Theory, Quantitative Methods Survey, Survey of Information Systems Issues, and Survey of Managerial Finance.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applications are accepted for students to begin the M.Acc. program during any semester (fall, spring, or summer). June 1 is the deadline for priority admission for the fall semester, and October 1 is the deadline for priority admission for spring. Applications will be accepted after these dates, but admission consideration is not guaranteed. Students are encouraged to apply early to facilitate early registration for classes.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php).** Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Management Admissions Test (GMAT) if required;
3. submit official transcripts of all previous college work.

NOTE: ***Letters of recommendation are not required unless a student is applying for an assistantship. Students applying for an assistantship must also submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete the Master of Accountancy program.***

Degree Requirements

The Master of Accountancy requires completion of 30 semester hours.
A capstone course must be passed with a grade of B- or higher with a maximum enrollment of two times. The degree is to be completed within six years from the time of admission to the degree program.

Curriculum: Accounting

The following illustrates the coursework requirements.

Required Core (13 hours)

- ACTG 6350 - Accounting Analytics **3 credit hours**
- ACTG 6820 - CPA Review: Auditing **1 credit hours**
- ACTG 6830 - CPA Review: Financial **1 credit hours**
- ACTG 6840 - CPA Review: Regulation **1 credit hours**
- ACTG 6850 - CPA Review: Business Environment **1 credit hours**
- BLAW 6520 - Current Legal Topics in Corporate Governance, Risk Management and Fraud **3 credit hours**

Capstone Course (taken in the last semester)

- ACTG 6670 - Advanced Financial Accounting and Reporting Problems **3 credit hours**

Electives (17 hours)

- Three hours in ACTG at the 6000 level
- Nine hours in ACTG at the 5000/6000 level
- Five hours in approved electives at the 6000 level

Assurance Specialization

- ACTG 5640 - Internal Auditing **3 credit hours**
- ACTG 5680 - Forensic Accountancy and Fraud Auditing **3 credit hours**
- ACTG 6610 - Advanced Governmental and Nonprofit Accounting and Reporting **3 credit hours**
- ACTG 6720 - Advanced Auditing and Public Accounting Practices **3 credit hours**
- ACTG 6730 - External Auditing II **3 credit hours**
- INFS 6300 - Management of Security Operations **3 credit hours**

Tax Accounting Specialization

Students electing to specialize in tax accounting must complete four of the following among their electives:

- ACTG 6510 - Federal Income Tax Research and Planning **3 credit hours**
- ACTG 6530 - Taxation of Pass-Through Entities **3 credit hours**
- ACTG 6540 - Taxation of Business Entities **3 credit hours**
- ACTG 6550 - U.S. International Taxation **3 credit hours**
- ACTG 6560 - Special Topics in Taxation **3 credit hours**

Program Notes

The business prerequisites for a student seeking the M.Acc.degree are

- an undergraduate course in business law or BLAW 3400, Legal Environment of Business
- undergraduate course in economics or ECON 2410 or 2420, Principles of Economics
- undergraduate course in statistics or BIA 6000, Quantitative Methods Survey
- undergraduate course in information systems or INFS 3100, Principles of Management Information Systems
- undergraduate course in finance or FIN 3010, Business Finance.

A recent graduate of an AACSB-accredited program would normally possess an adequate background in these prerequisites. In addition, students entering the M.Acc. degree program must have completed an additional 21 hours of prerequisites in accounting including

- ACTG 2110 and ACTG 2125, Principles I and II
- ACTG 3110 and 3120, Intermediate Accounting I and II
- ACTG 3310, Cost Accounting
- ACTG 4550, Introduction to Federal Income Tax
- ACTG 4620, External Auditing I

With proper planning the Master of Accountancy will fulfill the educational requirements to sit for the CPA exam in Tennessee.

Under special circumstances, a student may request to be exempted from taking the CPA Review classes (ACTG 6820, ACTG 6830, ACTG 6840, and ACTG 6850). For example, students who have previously passed the CPA exam or international students who do not intend to take the CPA exam may want to request an exemption. The approval of such a request is at the discretion of the director of the M.Acc. program. If an exemption is received, a student must substitute four credits of other 6000-level Accounting classes.

No foreign language or thesis is required in the program.

Students who have credit for the undergraduate equivalent of a 5000-level course are not permitted to enroll in the 5000-level course for credit.

Assurance Certificate

Audrey Scarlata, Department Contact
(615) 898-2625
audrey.scarlata@mtsu.edu
The certificate program in Assurance is designed for students interested in furthering their education in the Auditing and Assurance profession or those requiring accounting credit hours to be eligible for CPA certification to earn 12 graduate accounting hours and a certificate in Assurance. The courses required for the certificate will highlight the necessary skills needed to be successful in Auditing and Assurance accounting roles.

Admission Requirements

To be considered for admission to the Assurance Certificate program a student must meet ONE of the following:

1. have an undergraduate accounting degree from an AACSB International accredited institution with an overall undergraduate GPA of 3.00;
2. have an overall composite score >950, calculated as (Cumulative GPA x 200 + GMAT, with a minimum GMAT of 400;
3. have an upper-division composite score >1000, calculated as (Upper Division GPA x 200) + GMAT, with a minimum GMAT of 400;
4. International students must comply with the following provision: for undergraduate degrees from foreign institutions where a grade point average cannot be clearly established but where that work is thought to be equivalent to domestic grades of B or higher, admission eligibility may be determined by the GMAT score. A score of at least 450 is required for unconditional admission under such circumstances. Preparatory work taken at institutions with grading systems paralleling those of most U.S. institutions must conform to a B average.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Management Admissions Test (GMAT) if required;
3. submit official transcripts of all previous college work.

Applications are accepted for students to enter the certificate program during any semester (fall, spring, or summer). June 1 is the deadline for priority admission for the fall semester, and October 1 is the deadline for priority admission for spring. Applications will be accepted after these dates, but admission consideration is not guaranteed. Students are encouraged to apply early to facilitate early registration for classes.

Certificate Requirements

Candidate must complete a minimum of 12 semester hours with a 3.0 average.

Curriculum: Assurance

Candidates must complete 12 hours in the following course of study:

Select four of the following (12 hours)

- ACTG 5640 - Internal Auditing **3 credit hours**
- ACTG 5680 - Forensic Accountancy and Fraud Auditing **3 credit hours**
- ACTG 6610 - Advanced Governmental and Nonprofit Accounting and Reporting **3 credit hours**
- ACTG 6720 - Advanced Auditing and Public Accounting Practices **3 credit hours**
- ACTG 6730 - External Auditing II **3 credit hours**
- INFS 6300 - Management of Security Operations **3 credit hours**

Tax Certificate

Audrey Scarlata, Department Contact
(615) 898-2625
audrey.scarlata@mtsu.edu
The certificate program in Tax is designed for non M.Acc. students interested in furthering their education in the tax profession, or those requiring accounting credit hours to be eligible for CPA certification to earn 12 graduate accounting hours and a certificate in Tax. The curriculum will highlight the necessary skills needed to be successful in tax accounting roles.

Admission Requirements

To be considered for admission to the Tax Certificate program a student must meet ONE of the following:

1. have an undergraduate accounting degree from an Association to Advance Collegiate Schools of Business (AACSB) accredited institution with an overall undergraduate GPA of 3.00;
2. have an overall composite score >950, calculated as (Cumulative GPA x 200) +GMAT, with a minimum GMAT of 400;
3. have an upper-division composite score >1000, calculated as (Upper Division GPA x 200) + GMAT, with a minimum GMAT of 400;
4. international students must comply with the following provision: For undergraduate degrees from foreign institutions where a grade point average cannot be clearly established but where that work is thought to be equivalent to domestic grades of B or higher, admission eligibility may be determined by the GMAT score. A score of at least 450 is required for unconditional admission under such circumstances. Preparatory work taken at institutions with grading systems paralleling those of most U.S. institutions must conform to a B average.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Management Admissions Test (GMAT) if required.
3. submit official transcripts of all previous college work.

Applications are accepted for students to begin the certificate program during any semester (fall, spring, or summer). June is the deadline for priority admission for the fall semester, and October 1 is the deadline for priority admission for spring. Applications will be accepted after these dates, but admission consideration is not guaranteed. Students are encouraged to apply early to facilitate early registration for classes.

Certificate Requirements

Candidate must complete a minimum of 12 semester hours with a 3.0 average.

Curriculum: Tax

Candidate must complete 12 hours in the following course of study.

Select Four of the Following (12 hours)

- ACTG 6510 - Federal Income Tax Research and Planning **3 credit hours**
- ACTG 6530 - Taxation of Pass-Through Entities **3 credit hours**
- ACTG 6540 - Taxation of Business Entities **3 credit hours**
- ACTG 6550 - U.S. International Taxation **3 credit hours**
- ACTG 6560 - Special Topics in Taxation **3 credit hours**

Accounting

ACTG 5110 - Advanced Financial Accounting
3 credit hours Prerequisite: ACTG 3120 with a minimum grade of C. Extensive coverage of consolidated financial statement preparation. Financial accounting topics including advanced partnerships, interim financial reporting, segment reporting, foreign currency issues, and accounting for fiduciaries also covered. Readings from professional journals and research related to current accounting issues.

ACTG 5310 - Accounting for Decision Making
3 credit hours Prerequisites: ACTG 3310 with minimum grade of C; BIA 2610 or MATH 1530. In-depth analysis of costs; quantitative concepts relating to management objectives, control, and planning. Cost analysis and management accounting practices and problems using a variety of problem sets, statistical techniques, case studies, computer applications, and other materials.

ACTG 5510 - Accounting Systems
3 credit hours Prerequisites: ACTG 2120 or ACTG 2125 or ACTG 3000 with minimum grade of C; INFS 2200 or CSCI 1150. An introduction to accounting information systems in a variety of technological environments. Emphasis on business process modeling, accounting cycle controls, and database design and implementation.

ACTG 5530 - Federal Taxes I
3 credit hours Prerequisites: Graduate standing and permission of department chair. Addresses determination of taxable income for individuals; federal income tax returns and research methods.

ACTG 5610 - Governmental Accounting and Reporting
3 credit hours Prerequisite: ACTG 3110 with a minimum grade of C. Accounting principles for state and local governments and not-for-profit entities; financial statement preparation and analysis for government and not-for-profit entities including specialized industries such as healthcare, education, and utilities; and federal/government accounting.

ACTG 5640 - Internal Auditing
3 credit hours Prerequisites: ACTG 3120 and ACTG 4510 with a minimum grade of C; BIA 3620. Application of internal auditing concepts. Includes gathering and analyzing company data, assessing risk, applying professional and ethical standards, performing statistical sampling, and preparing internal audit reports. (Recommended for CIA exam candidates.)

ACTG 5680 - Forensic Accountancy and Fraud Auditing
3 credit hours Prerequisite: ACTG 4620 or 4640 or approval of department chair. Practice of forensic accounting, i.e., nontraditional investigative aspects of accountancy (e.g., litigation support, business interruptions, etc.); emphasis on fraud prevention and the detection of fraudulent intent to obtain improper individual or group gains.

ACTG 5840 - Study Abroad
3 credit hours Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

ACTG 6100 - Accounting and Legal Issues for Managers
3 credit hours Surveys accounting skills and legal perspectives necessary for managers without undergraduate business degrees to enter the businessworld. Will not meet the requirements for the M.S. in Information Systems, M.Acc. in Accounting, or the M.B.A. degree programs.

ACTG 6310 - Advanced Cost Accounting, Budgeting, and Controllership
3 credit hours Prerequisite: ACTG 3020 or 3310 or ACTG 6910. Recent conceptual and analytic development in cost accounting, budgeting, and controllership. Includes principles and procedures in preparation of business budgets and methods of accounting for managerial control of cost of production, distribution, and administration through the use of standards.

ACTG 6320 - Strategic Cost and Control in Healthcare
3 credit hours Introduction to the tools healthcare managers use to plan, control, and evaluate their organization's financial performance. Special emphasis on the strategic thrust control systems and

their interaction with the societal problem of increasing healthcare demand and costs.

ACTG 6350 - Accounting Analytics
3 credit hours Prerequisite: ACTG 4510/ACTG 5510 with a grade of "C" or better and an undergraduate statistics course, BIA 6000, or consent of instructor. Study of the use of accounting analytics to identify, analyze, and solve accounting and business problems and communicate insights to stakeholders. Hands-on experience with analytics tools used by accounting professionals.

ACTG 6510 - Federal Income Tax Research and Planning
3 credit hours Prerequisite: ACTG 4550 or consent of instructor. Skillful application of tax research methodology in the use of primary tax authority, secondary tax reference materials, and research aids. Research through practice in the use of materials available in the tax library.

ACTG 6530 - Taxation of Pass-Through Entities
3 credit hours Prerequisite: ACTG 4550 with a minimum grade of C or consent of instructor. Principles of partnership and S corporation taxation. Addresses the tax consequences of formation, operations, distributions, and liquidations of partnerships. Also covers tax rules unique to S corporations.

ACTG 6540 - Taxation of Business Entities
3 credit hours Prerequisite: ACTG 4550 with minimum grade of C or consent of instructor. The federal income taxation of business entities, including C corporations, S corporations, partnerships, limited liability companies, and estates and trusts. Also covers estate and gift taxation.

ACTG 6550 - U.S. International Taxation
3 credit hours Prerequisite: ACTG 4550 with minimum grade of C or consent of instructor. Basic concepts of U.S. taxation of international transactions. Topics include sourcing of income from foreign activities, Subpart F income, selecting the proper vehicle for foreign investments, and computing foreign tax credits.

ACTG 6560 - Special Topics in Taxation
3 credit hours Prerequisite: ACTG 4550 with a minimum grade of C or consent of instructor. In-depth investigation of selected advanced topics in taxation.

ACTG 6570 - International Financial Reporting and Controls
3 credit hours Prerequisite: Nine hours of accounting with a C or better. Advanced study of international financial reporting issues, international financial statement analysis, international accounting standards, foreign currency translation, foreign currency transaction reporting, international management accounting issues, and international taxation practices.

ACTG 6580 - International Financial Reporting Standards
3 credit hours Prerequisite: ACTG 3120 with a C or better. Extensive coverage of the International Accounting Standards Board's International Financial Reporting Standards (IFRS) with an emphasis on inventories, revalued fixed assets, intangible assets, business combinations, and loans and receivables. Examines international conceptual framework as well as the organizations involved in determining the standards. Importance placed on changing from financial statements prepared under U.S. generally accepted accounting standards to IFRS-based statement.

ACTG 6610 - Advanced Governmental and Nonprofit Accounting and Reporting
3 credit hours Prerequisites: ACTG 3120 and 4610 (ACTG 5610) with a minimum grade of C. State and local government accounting principles and procedures; accounting and reporting for state and local governments, colleges and universities, hospitals, and nonprofit organizations. Auditing practices for all these organizations.

ACTG 6650 - Advanced Accounting Theory
3 credit hours Prerequisite: Consent of department chair. History and development of accountancy, tax structures, and industrial development of past, present, and projected societies including relevant research into current controversial issues. Extensive research required. Required for M.Acc.

ACTG 6670 - Advanced Financial Accounting and Reporting Problems
3 credit hours Prerequisite: Accounting major or consent of instructor. Application of theoretical concepts and promulgations of authoritative bodies to financial accounting and financial reporting situations encountered in practice.

ACTG 6720 - Advanced Auditing and Public Accounting Practices
3 credit hours Prerequisite: ACTG 4620 or consent of department chair. Critical analysis of techniques used in auditing, method of data collection, and nature of audit evidence. Includes modern and relevant statistical and social research techniques and computer use as applied to the various steps in audit practices and procedures.

ACTG 6730 - External Auditing II
3 credit hours Prerequisite: ACTG 4620 or equivalent with a minimum grade of C; BIA 2610 or equivalent. Additional topics related to the provision of assurance services by external auditors. Topics include audits of internal controls over financial reporting, audit sampling, auditors' ethical responsibilities and legal liability, other assurance services, and other relevant topics.

ACTG 6810 - Empirical Methods in Accounting
3 credit hours Prerequisites: Foundation requirements and consent of instructor. Independent study and research on topics in or related to accounting under supervision of graduate faculty.

ACTG 6820 - CPA Review: Auditing
1 credit hours Prerequisites: Admission to M.Acc. program; ACTG 4620 with minimum grade of C; and BIA 2610 with minimum grade of C. Review of the material covered on the Auditing and Attestation section of the CPA exam, including audit and other reports, engagement acceptance, planning and risk assessment, audit evidence, audit sampling and communications, audit documentation, and professional responsibilities.

ACTG 6830 - CPA Review: Financial
1 credit hours Prerequisites: Admission to M.Acc. program and ACTG 3120 with minimum grade of C. Review of the material covered on the Financial Accounting and Reporting section of the CPA exam, including information related to the conceptual framework, standards, and presentation of financial statements; recognition, measurement, valuation, and presentation of specific types of transactions and financial statement accounts; governmental accounting and reporting; and not-for-profit accounting and reporting.

ACTG 6840 - CPA Review: Regulation
1 credit hours Prerequisites: Admission to the M.Acc. program, ACTG 4550 with minimum grade of C, and BLAW 3400. Review of the material covered on the Regulation section of the CPA exam, including information related to ethics, the professional and legal responsibilities of CPAs, business law, federal tax processes, taxation of property transactions, and the taxation of individuals and business entities.

ACTG 6850 - CPA Review: Business Environment
1 credit hours Prerequisites: Admission to the M.Acc. program, ACTG 3310, ECON 2410 or ECON 2420, FIN 3010, and INFS 3100 with minimum grade of C. Review of the material covered on the Business Environment and Concepts section of the CPA Exam, including information related to corporate governance, economic concepts and analysis, financial management, information systems and communications, strategic planning, and operations management.

ACTG 6910 - Accounting and Business Decisions
3 credit hours Prerequisite: ACTG 2120 or equivalent. Accounting concepts and their application to the decision-making process. Research reports on a variety of financial and managerial accounting topics prepared and presented orally by the student. Not open to M.Acc. students.

ACTG 6920 - Financial Statement Analysis
3 credit hours Prerequisite: ACTG 2120 with minimum grade of C or equivalent. Concepts and techniques of financial statement analysis, income determination, and related institutional background. Not open to M.Acc. students.

Business Law

BLAW 6500 - Legal Aspects of Healthcare
3 credit hours The U.S. health care system; its major stakeholders; and the laws and regulations that apply to health care institutions, professionals, and suppliers including Medicare, electronic health records, health care fraud and abuse, compliance planning, certificates of need, health care business associations, federal tax exemption, liability and licensing issues, and ethics in decision making.

BLAW 6520 - Current Legal Topics in Corporate Governance, Risk Management and Fraud
3 credit hours Prerequisite: Graduate standing; BLAW 3400 with minimum grade of C. Delves into current legal topics in corporate law and governance, including the division of power and responsibilities between the board of directors, board committees,

officers, auditors, and shareholders; securities laws and other fraud topics; the duty of care and other fiduciary duties of directors, officers and auditors; special problems of closely held organizations; how governance models compare across the globe; and the Sarbanes-Oxley Act. Includes research related cases in key industries of their prospective careers, such as the healthcare and audit services.

MBA Accounting

MBAA 6815 - Accounting Information for Managers
2 credit hours Prerequisites: ACTG 3000 or ACTG 2110 and ACTG 2120 and FIN 3000 or FIN 3010 or permission of department. Principles, concepts, and tools in financial and managerial accounting, including product costing, budgeting, decision making tools, performance measurement, financial accounting concepts, financial statement analysis tools, and reporting responsibilities of management. Not open to M.Acc. students.

MBAA 6885 - Decision Making in Accounting and Finance
3 credit hours (Same as MBAF 6885.) Prerequisites: MBAA 6815 and MBAF 6845. An integrative course in decision making in accounting and finance for MBA students. Topics include financial statement analysis, financial distress and bankruptcy, efficient markets, contracting and agency, and risk analysis. Not open to M.Acc. students.

Economics and Finance

Stuart Fowler, Interim Chair
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The Department of Economics and Finance offers three degree programs: the Master of Science (M.S.) with a major in Finance, the Master of Arts (M.A.) with a major in Economics, and the Doctor of Philosophy (Ph.D.) with a major in Economics.

Economics, M.A.

Adam Rennhoff, Program Director
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Adam.Rennhoff@mtsu.edu
The mission of the graduate program in economics is to provide students with advanced studies in economic theory and research methodology. To accomplish its mission, the Department of Economics and Finance offers three degree programs: the Master of Arts (M.A.) with a major in Economics, the Master of Science (M.S.) with a major in Finance, and the Doctor of Philosophy (Ph.D.) with a major in Economics. The department's approach to these degree programs is global, interactive, and innovative.
M.A. students in economics are offered preparation for careers in private business and public service. The focus of the M.A. program is on decision analysis and applied research.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants are expected to possess a satisfactory score on the Graduate Record Examination (GRE).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE).
3. submit official transcripts of previous college work.

Degree Requirements

The Master of Arts in Economics requires completion of a minimum of 30 semester hours (10 courses) if a thesis is written or 33 semester hours (11 courses) if a thesis is not written. At least 24 hours (8 courses) must be in courses numbered exclusively as 6000-level graduate courses (other courses can be taken at the 5000 level). A minimum of 18 of these semester hours must be in economics and include ECON 6010, ECON 6020, ECON 6060, and ECON 6070.
Candidates must successfully complete a written comprehensive examination that may be taken no more than twice. For the major in Economics, the comprehensive examination covers the three core areas: macroeconomics, microeconomics, and econometrics.
Before taking the comprehensive examination, the student is expected to attend and actively participate in regularly scheduled departmental student/faculty workshops where research papers are presented and discussed by the participants.

Curriculum: Economics (general)

The following illustrates the coursework requirements.

Thesis Option (30 hours)

Core Courses (12 hours)

- ECON 6010 - Macroeconomics I **3 credit hours**
- ECON 6020 - Microeconomics I **3 credit hours**
- ECON 6060 - Econometrics I **3 credit hours**
- ECON 6070 - Econometrics II **3 credit hours**

Electives (15 hours)

Students completing a thesis must take 15 hours of electives from ECON 6000-6999 (excluding designated core courses).

Thesis (3 hours)

- ECON 6640 - Thesis Research **1 to 6 credit hours (3 credit hours)**

Non-thesis Option (33 hours)

Core Courses (12 hours)

- ECON 6010 - Macroeconomics I **3 credit hours**
- ECON 6020 - Microeconomics I **3 credit hours**
- ECON 6060 - Econometrics I **3 credit hours**
- ECON 6070 - Econometrics II **3 credit hours**

Electives (21 hours)

Students choosing the non-thesis option must take 21 hours of electives from ECON 6000-6999 (excluding designated core courses).

Program Notes

Students may include a minor in their degree programs. A minor consists of a minimum of 12 semester hours of approved courses. Students not electing a minor may include a cognate area of up to 6 semester hours in their programs. Cognate areas can be formed from courses in accounting, agriculture, finance, geography, geology, history, insurance, management, political science, psychology, real estate, sociology, and data science.

Economics, Ph.D.

Adam Rennhoff, Program Director
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Ph.D. students in economics are trained for careers in teaching and applied research. The Ph.D. provides students with the opportunity to combine advanced training in economics with educational pedagogy and research methodology.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

For admission to the doctoral program, candidates are expected to attain a GRE score of 302 or better. Candidates must also have completed, at a minimum, one semester of calculus and hold a baccalaureate degree with a minimum 3.0 GPA (on a 4 point scale).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the General Record Examination (GRE).
3. submit official transcripts of all previous college work.

Degree Requirements

The Doctor of Philosophy in Economics requires completion of a minimum of 64 semester hours, including a minimum of 51 hours of formal coursework and 13 hours of dissertation research. Students entering with a master's degree in Economics may have up to 12 hours applied toward the 51 hours of formal coursework. Of the total 64 hours, at least 43 hours must be at the 7000 level.
Students must demonstrate competency in economic theory by passing the Qualifying Examination in microeconomics and econometrics at the end of the the first year of study. Students must then complete six field courses and a research paper in their chosen field during the second year. During the summer of the second year, students develop a dissertation prospectus under the guidance of a dissertation chair. Each student is responsible for securing the agreement of a Ph.D. faculty member to become the chair of the student's dissertation committee. The chair will suggest other potential committee members. Each student must successfully defend a dissertation prospectus in an oral examination and, upon approval by the student's dissertation committee, prepare a dissertation as a Ph.D. candidate. The dissertation is completed with agreement of the chair and two additional committee members.

Curriculum: Economics

The following illustrates the minimum coursework requirements.

Required Core Courses (33 hours)

- ECON 7005 - Advanced Mathematical Methods for Economists **3 credit hours**
- ECON 7010 - Macroeconomics I **3 credit hours**
- ECON 7020 - Microeconomics I **3 credit hours**

- ECON 7030 - Macroeconomics II **3 credit hours**
- ECON 7040 - Microeconomics II **3 credit hours**
- ECON 7060 - Econometrics I **3 credit hours**
- ECON 7070 - Econometrics II **3 credit hours**
- ECON 7080 - Econometrics III **3 credit hours**
- ECON 7090 - Econometrics IV **3 credit hours**
- ECON 7660 - History of Economic Thought **3 credit hours**
- ECON 7950 - Instructional Development and Practice in Economics **3 credit hours**

Field Courses (Choose 18 hours)

- ECON 7130 - Behavioral Economics **3 credit hours**
- ECON 7400 - Health Economics **3 credit hours**
- ECON 7420 - Public Choice **3 credit hours**
- ECON 7430 - Public Finance **3 credit hours**
- ECON 7470 - Economic Growth and Development **3 credit hours**
- ECON 7510 - Labor Economics I **3 credit hours**
- ECON 7520 - Labor Economics II **3 credit hours**
- ECON 7530 - International Economics I **3 credit hours**
- ECON 7550 - International Economics II **3 credit hours**
- ECON 7710 - Monetary Economics I **3 credit hours**
- ECON 7725 - Asset Pricing **3 credit hours**
- ECON 7730 - Corporate Finance **3 credit hours**
- ECON 7810 - Industrial Organization I **3 credit hours**
- ECON 7820 - Industrial Organization II **3 credit hours**

Dissertation Research (13 hours)

- ECON 7640 - Dissertation Research **1 to 6 credit hours**

Sample Course and Examination Schedule

The following sample schedule outlines the sequence of Ph.D. course requirements:

Fall Semester-Year 1

- ECON 7005 - Advanced Mathematical Methods for Economists **3 credit hours**
- ECON 7010 - Macroeconomics I **3 credit hours**
- ECON 7020 - Microeconomics I **3 credit hours**
- ECON 7060 - Econometrics I **3 credit hours**
- ECON 7070 - Econometrics II **3 credit hours**

Spring Semester-Year 1

- ECON 7030 - Macroeconomics II **3 credit hours**
- ECON 7040 - Microeconomics II **3 credit hours**
- ECON 7080 - Econometrics III **3 credit hours**
- ECON 7090 - Econometrics IV **3 credit hours**

- ECON 7660 - History of Economic Thought **3 credit hours**

Summer-Year 1

- ECON 7950 - Instructional Development and Practice in Economics **3 credit hours**
- ECON 7099 - Comprehensive Examination and Preparation **1 to 3 credit hours**
- Qualifying Exam-Microeconomics
- Qualifying Exam-Econometrics

Fall Semester-Year 2 (Choose 4)

- ECON 7130 - Behavioral Economics **3 credit hours**
- ECON 7400 - Health Economics **3 credit hours**
- ECON 7420 - Public Choice **3 credit hours**
- ECON 7430 - Public Finance **3 credit hours**
- ECON 7470 - Economic Growth and Development **3 credit hours**
- ECON 7510 - Labor Economics I **3 credit hours**
- ECON 7530 - International Economics I **3 credit hours**
- ECON 7710 - Monetary Economics I **3 credit hours**
- ECON 7725 - Asset Pricing **3 credit hours**
- ECON 7810 - Industrial Organization I **3 credit hours**

Spring Semester-Year 2 (Choose 2)

- ECON 7430 - Public Finance **3 credit hours**
- ECON 7520 - Labor Economics II **3 credit hours**
- ECON 7550 - International Economics II **3 credit hours**
- ECON 7730 - Corporate Finance **3 credit hours**
- ECON 7820 - Industrial Organization II **3 credit hours**
- ECON 7640 - Dissertation Research **1 to 6 credit hours**

Summer-Year 2

- ECON 7640 - Dissertation Research **1 to 6 credit hours**
- Field Paper due by July 1

Fall Semester-Year 3

- ECON 7640 - Dissertation Research **1 to 6 credit hours**
- Dissertation proposal due by October 1
- Dissertation proposal defense

Spring Semester-Year 3

- ECON 7640 - Dissertation Research **1 to 6 credit hours**

Summer-Year 3

- ECON 7640 - Dissertation Research **1 to 6 credit hours**

Fall Semester-Year 4

- ECON 7640 - Dissertation Research **1 to 6 credit hours**

Spring Semester-Year 4

- ECON 7640 - Dissertation Research **1 to 6 credit hours**
- Dissertation Completion

Finance, M.S.

Economics and Finance
(615) 898-2520
The purpose of the M.S. degree in Finance is to provide a graduate-level knowledge base and expertise to those who work in the growing field of finance, assisting individuals, companies, and governments, among others, in navigating the increasingly complex and essential world of financial analysis. The M.S. in Finance program seeks to provide students with instruction that will prepare them for careers as financial analysts, consultants, managers, and planners.

Admission Requirements

Applicants must provide

- transcript(s);
- personal statement of purpose;
- resume or CV.

Applicants with less than a 3.0 GPA or without an undergraduate degree in business must also submit GMAT or GRE scores.
The GMAT/GRE requirement may be waived for applicants that meet any of the following conditions:

- An earned bachelor's degree with a GPA of 2.75 and five (5) or more years of professional work experience;
- An earned graduate degree or professional degree from a regionally accredited college or university.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicants must

1. submit an application with the appropriate application fee (online at www.mtsu.edugraduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE).
3. submit official transcripts of previous college work.

Degree Requirements

The Master of Science in Finance requires completion of 33 semester hours (24 hours of core courses and 9 hours of elective courses). The program is designed to be completed in one calendar year.

Curriculum: Finance

The following illustrates the coursework requirements.

Core Courses (24 hours)

- FIN 6010 - Foundations of Finance **3 credit hours**
- FIN 6060 - Financial Econometrics **3 credit hours**
- FIN 6110 - Financial Modeling **3 credit hours**
- FIN 6460 - Investments **3 credit hours**
- FIN 6710 - Financial Statement Analysis **3 credit hours**
- FIN 6730 - Financial Institutions and Markets **3 credit hours**
- FIN 6750 - Corporate Finance **3 credit hours**

- FIN 6920 - Cases in Finance **3 credit hours**

Elective Courses (9 hours)

Choose 9 hours from the courses listed below.

- FIN 5900 - TVA Investment Challenge **3 credit hours**
- FIN 6550 - Real Estate Finance and Investment **3 credit hours**
- FIN 6560 - Mergers and Acquisitions **3 credit hours**
- FIN 6740 - Bond Market Analysis **3 credit hours**
- FIN 6760 - Derivatives Valuation **3 credit hours**
- FIN 6780 - Portfolio Analysis **3 credit hours**
- FIN 6860 - International Financial Management **3 credit hours**

Economics

ECON 5420 - Labor and Human Resource Economics
3 credit hours Current issues and theories, returns to training and education (human capital), earnings differences; theoretical interpretation and empirical economic impacts of unions, government regulation, and international forces upon labor relations and labor markets; human resource information systems (spreadsheet applications) and integration of Internet information sources and forensic analysis.

ECON 5440 - International Economics
3 credit hours Differences between domestic trade and international trade and foundations of international trade; economic effects of free trade and restricted trade; mechanisms of international payments and structure of balance of payments; history and contemporary issues of trade policies and world monetary systems.

ECON 5470 - Economic Development of the Third World
3 credit hours Conditions and problems of the less developed countries; causes, processes, and consequences of economic development; introduction to basic growth models, development theories, and strategies for development. Economic as well as noneconomic factors studied.

ECON 5500 - Urban and Regional Economics
3 credit hours Prerequisites: ECON 2410 and ECON 2420. Economic problems of urban communities, including problems resulting from population shifts to suburbia, urban planning, land utilization, revenue structures, urban renewal, transportation, problems of minority, and poverty groups.

ECON 5510 - Unions and Collective Bargaining
3 credit hours Collective bargaining contract administration and alternative dispute resolution mechanisms. Information technology tools. Analytical focus on the impacts of total compensation agreements, strike strategies, and the interdependent influences of the union and non-union sectors of the economy. Practical cases emphasized. A brief international comparative survey of unions and other collective relationships included.

ECON 5620 - Econometrics and Forecasting
3 credit hours Prerequisites: BIA 3620 and MATH 1810 or equivalent. Application of mathematical and statistical techniques to economic problems. Introduces econometric model construction and estimation and related problems. Requires use of econometric computer package.

ECON 5650 - Comparative Economic Systems
3 credit hours Prerequisite: Admission into the College of Business. Compares economic institutions and performance among nations; presents the historical and cultural context of economic evolution in selected nations; and examines the relationship between institutional arrangements and outcomes such as prosperity, liberty, and equality.

ECON 5840 - Study Abroad
3 credit hours Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

ECON 5890 - Internship in Economics
1 to 3 credit hours Prerequisite: Graduate status and recommendation of advisor. Supervised work experience in cooperating business firms or government agencies together with specialized academic study relating to the work experience. Pass/Fail.

ECON 5990 - Independent Study in Economics
1 to 3 credit hours Problems for intensive study are chosen in joint consultation between student and instructor.

ECON 6000 - Managerial Economics
3 credit hours Prerequisites: ECON 2410 and 2420 or 4570 or equivalent. Primarily for M.B.A. students with particular attention given to business administration and finance topics including demand analysis, production and cost decisions, quantitative market analysis, capital budgeting, and alternative theories of the firm. Special emphasis on case studies, software applications, and interpretation of economic meanings of related analyses.

ECON 6010 - Macroeconomics I
3 credit hours Core course in macroeconomic theory for students pursuing an M.A. in Economics. First part focuses on long-run economic growth. Topics include

exogenous and endogenous growth theory, overlapping generations models, and the neoclassical growth model. Second part focuses on short-run economic fluctuations. Topics include real business cycle theory, traditional Keynesian theories, and New Keynesian models featuring rational expectation. Mathematical models used to address competing theories; comfort with multivariate calculus and linear algebra essential.

ECON 6020 - Microeconomics I
3 credit hours Core course in microeconomic theory for students pursuing an M.A. in Economics. First part develops the theory of consumer choice with extensions including the labor supply model, intertemporal choice, and choice under uncertainty. Second part models theory of the firm in both perfectly competitive and monopoly industry settings. Mathematical models used to derive theories; comfort with multivariate calculus and linear algebra essential.

ECON 6060 - Econometrics I
3 credit hours (Same as FIN 6060.) First core course in econometrics for students pursuing an M.A. in Economics. Focuses on ordinary least squares regression analysis, covering the problems of specification, multicollinearity, heteroskedasticity, autocorrelation, and endogeneity. SAS statistical software used as a tool for manipulating data, conducting forecasts, carrying out Monte Carlo simulations, and performing statistical inference.

ECON 6070 - Econometrics II
3 credit hours Second core course in econometrics for students pursuing an M.A. in Economics. Emphasizes methods of time series analysis, including Box-Jenkins methods, general-to-specific modeling, volatility models, vector autoregressions, unit roots and cointegration, unobserved component and state space models, and neural networks. Integrates practical applications in various computing environments including SAS, RATS, and MATLAB.

ECON 6099 - Special Topics in Economics
3 credit hours Prerequisite: Permission of instructor. An in-depth study of a special topic in economics. Interested students should contact the instructor for specifics.

ECON 6100 - Mathematical Methods for Economics
3 credit hours Preparation for core courses in economics. Covers all essential mathematical methods including basic matrix algebra, exponential and logarithmic functions, the basics of differential calculus, unconstrained optimization, constrained optimization subject to equality and inequality constraints, comparative statics, and the Envelope theorem.

ECON 6400 - Health Economics
3 credit hours Applications of microeconomics to analysis of the health care delivery system in the United States. Major issues include the private and public demand for health care, supply of health care, cost of health care, the pricing of health care, and the analysis of the various health care reform policies of the industry. Examines how economics can provide valuable insights into the above problems of social choice.

ECON 6420 - Public Choice
3 credit hours Prerequisites: Graduate status and proficiency in reading and writing English. Provides an advanced treatment of the application of economic theory and methodology to the study of politics. Topics will include the structure and scope of government, collective decision making, bureaucratic and special interest group
behavior, intergovernmental relations, comparative political economy, and constitutional political economy.

ECON 6430 - Public Finance
3 credit hours (Same as FIN 6430.) Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance, health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.

ECON 6450 - Monetary Policy
3 credit hours (Same as FIN 6450.) Prerequisite: ECON 3210 or equivalent recommended. Objectives and limitations of monetary policy, alternative monetary theories underlying policy decisions and the controversy among theories, transmission channels of monetary policy, alternative strategies used to achieve the objectives of monetary policy, practical

considerations in the execution of monetary policy, global linkages and monetary policy, and the effects and consequences of policy decisions on economic activity and business decisions.

ECON 6460 - Equity Valuation
3 credit hours (Same as FIN 6460.) Prerequisite: FIN 3000 or FIN 3010 or FIN 6000. Focuses on the pricing of equity securities using discounted cash flow, relative valuation, and the Black-Scholes real option valuation approaches in the top-down analysis framework. Focuses on analyzing the macroeconomic environment, forecasting short-term and long-term stock market trends, performing industry analysis, identifying the key value drivers for the industry and stocks, interpreting accounting and non-accounting information necessary for valuation, establishing assumptions for equity valuation models, applying valuation quantitative models in the stock research project, and presenting equity research in a professional manner.

ECON 6470 - Economic Growth and Development
3 credit hours Prerequisites: ECON 2410 and 2420 and permission of instructor. Satisfies the M.B.A. international course requirement. Critical analysis of causes, processes, and consequences of economic development; evaluation of various policies and strategies for economic development; introduction to advanced growth models and theories. Special emphasis on the less developed countries.

ECON 6530 - International Economics I
3 credit hours Prerequisite: Graduate standing. Introduces the core models of international economics. Focusing on alternative returns to scale models, students will analyze the direction, volumes, and effects of international trade; various trade policies and their effects; optimal entry modes of multinationals into foreign markets (FDI or exports, vertical-integration, or offshore outsourcing, etc.). Students will also analyze determinants and effects of the slicing of the global value chain, regional economic integration, exchange rate movements, and balance of payments deficits.

ECON 6560 - Mergers and Acquisitions
3 credit hours (Same as FIN 6560.) Issues covered include the reasons firms merge, buyer and seller motivations, the assessment of merger prospect value, merger waves and their consequences, the concentration of economic power resulting from mergers, policies toward mergers, the effects of takeover defenses, and the effects of mergers on the economy.

ECON 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

ECON 6660 - History of Economic Thought
3 credit hours Prerequisites: Graduate status and proficiency in reading and writing English. Examines the history of Western economics beginning with the ancient Greeks, including the medieval scholastics, the early modern mercantilists, and selected thinkers from classical liberal economics, socialism, the historical and institutionalist schools of economics, neoclassical economics, and contemporary economics.

ECON 6730 - Financial Institutions
3 credit hours (Same as FIN 6730.) Prerequisite: FIN 3010 with minimum grade of C. Focus on the common and distinctive aspects of the provision of financial services and the management of risk associated with those services. Roles, characteristics, and operation of financial institutions, constraints that these institutions face in meeting that objective, regulatory environment within which they operate, risks that they face and the management of those risks, evolution experienced during the 1980s and 1990s, and the probable course of change in the years ahead.

ECON 6990 - Independent Study in Economics
1 to 3 credit hours Independent study of a particular topic selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered.

ECON 6999 - Comprehensive Examination and Preparation
1 to 3 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

ECON 7005 - Advanced Mathematical Methods for Economists
3 credit hours Prerequisite: ECON 6100 or equivalent as determined by instructor. Covers optimization, including the Lagrange equation and the envelope theorem, linear equations, eigenvalues, orthogonality, and least-squares estimators.

ECON 7010 - Macroeconomics I
3 credit hours Prerequisite: ECON 6100. First-semester core course in macroeconomic theory for students pursuing the Ph.D. in Economics. Macroeconomic models are used to study topics related to the national economy. Topics include dynamic macroeconomics, the basic Solow model, savings in an overlapping generations model, infinitely lived agents, recursive deterministic models, recursive stochastic models, Hansen's real business cycle model, practical dynamic programming, impulse response functions, vector auto-regressions, and money.

ECON 7020 - Microeconomics I
3 credit hours Prerequisite: ECON 6100. First-semester core course in microeconomic theory for students pursuing the Ph.D. in Economics. Microeconomic models are used to study topics related to the production of firms and consumer choice. Topics include profit maximization, cost minimization, utility maximization, choice and demand, consumer and producer surplus, uncertainty, competitive markets, and monopoly.

ECON 7030 - Macroeconomics II
3 credit hours Prerequisites: ECON 6100 and ECON 7010. Second-semester core course in macroeconomic theory for students pursuing a Ph.D. in Economics. Focuses on modern intertemporal macroeconomics. Develops discrete-time dynamic optimization techniques and examines the role of fiscal and monetary policies in centralized and decentralized economics and their welfare implications. Reviews recent developments in economic growth theory and international macroeconomics. Focus is quantitative but developing intuition about macroeconomic dynamics stressed.

ECON 7040 - Microeconomics II
3 credit hours Prerequisites: ECON 6100 and ECON 7020. Second-semester core course in microeconomic theory for students pursuing a Ph.D. in Economics. Examines oligopolies and pricing strategies with game theory, general equilibrium including the incorporation of public goods and externalities, and information economics with asymmetric information in principle-agent models. Mathematical models used to derive the theories; comfort with multivariate calculus and linear algebra essential.

ECON 7060 - Econometrics I
3 credit hours Prerequisite: ECON 6100. First of three Ph.D.-level courses in econometrics, in which empirical models are used to address research questions. Topics include linear algebra, estimation, ordinary least squares, statistical inference, hypothesis testing, dummy variables, the linear statistical model, regression analysis, and non-linear models. Integrates practical applications in various computing environments, including SAS, STATA, RATS, and MATLAB.

ECON 7070 - Econometrics II
3 credit hours Prerequisites: ECON 6100 and ECON 7060. Second of three Ph.D.-level courses in econometrics, in which empirical models are used to address research questions. Topics include the methods of time series analysis, Box-Jenkins methods, general-to-specific modeling, volatility models, vector auto-regressions, unit roots, co-integration, unobserved components, state space models, and neural networks. Integrates practical applications in various computing environments, including SAS, STATA, RATS, and MATLAB.

ECON 7080 - Econometrics III
3 credit hours Prerequisites: ECON 7060, ECON 7070, and passed Ph.D. qualifying exams in microeconomics and macroeconomics. The third of three Ph.D.-level courses in econometrics, in which empirical models are used to address research questions. Emphasizes nonlinear estimation methodology for cross-section and panel data. Includes discussion of various qualitative and limited dependent variable models, including those for discrete responses, censored and truncated data, sample selection problems, treatment effects, and duration analysis. Incorporates practical applications in SAS, STATA, and other computing environments.

ECON 7090 - Econometrics IV
3 credit hours Prerequisites: ECON 7060, ECON 7070, and ECON 7080. The fourth of four Ph.D.-level courses in econometrics; uses empirical models to address research questions. Topics include the

methods of time series analysis, stationarity, autoregressive moving average models, forecasting, dynamic panel regression, and vector autoregression. Incorporates practical applications in Stata, R, and other computing environments.

ECON 7099 - Comprehensive Examination and Preparation
1 to 3 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

ECON 7130 - Behavioral Economics
3 credit hours Prerequisite: ECON 7040. Advanced methods used in practical applications in microeconomics. Topics include ways that psychologically more realistic assumptions about people can improve economic analysis.

ECON 7400 - Health Economics
3 credit hours Applications of microeconomics to analysis of the health care delivery system in the United States. Major issues include the private and public demand for health care, supply of health care, cost of health care, the pricing of health care, and the analysis of the various health care reform policies of the industry. Examines how economics can provide valuable insights into the above problems of social choice.

ECON 7420 - Public Choice
3 credit hours Prerequisites: Graduate status and proficiency in reading and writing English. Provides an advanced treatment of the application of economic theory and methodology to the study of politics. Topics will include the structure and scope of government, collective decision making, bureaucratic and special interest group
behavior, intergovernmental relations, comparative political economy, and constitutional political economy.

ECON 7430 - Public Finance
3 credit hours Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance, health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.

ECON 7470 - Economic Growth and Development
3 credit hours Prerequisites: ECON 2410 and 2420 and permission of instructor. Satisfies the M.B.A. international course requirement. Critical analysis of causes, processes, and consequences of economic development; evaluation of various policies and strategies for economic development; introduction to advanced growth models and theories. Special emphasis on the less developed countries.

ECON 7500 - Economics Workshop
1 credit hours Students present material related to their dissertation proposals or ongoing dissertation research to peers and the graduate faculty in a formal workshop setting. Credit is awarded after a student completes two separate workshop presentations that are judged satisfactory by the attending graduate faculty.

ECON 7510 - Labor Economics I
3 credit hours Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Serves as the first half of an introduction to labor economics in the areas of human capital formation, wage determination, labor market mobility and job search, changes in wage structure, youth behavior and outcomes, shifts in labor demand, compensating wage differentials, and discrimination. Focus is to introduce students to current economic research methods and modern econometric techniques in preparation for conducting independent research.

ECON 7520 - Labor Economics II
3 credit hours Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Serves as the second half to an introduction of the leading theories in labor economics. Focuses on the most current published research techniques as found in top general interest and labor field journals. The nature of the course dictates that a wide range of topics be covered and that content changes. Past topics have included unemployment and inflation, employment allocation and job loss, technological progress, globalization,

inequalities, labor market policies, youth behavior and outcomes, health, and labor supply decisions. Frequent use of multivariate regression analysis and other modern econometric techniques allows students to enhance skills necessary to conduct independent research in the field.

ECON 7530 - International Economics I
3 credit hours Prerequisite: Graduate standing. Introduces the core models of international economics. Focusing on alternative returns to scale models, students will analyze the direction, volumes, and effects of international trade; various trade policies and their effects; optimal entry modes of multinationals into foreign markets (FDI or exports, vertical-integration, or offshore outsourcing, etc.). Students will also analyze determinants and effects of the slicing of the global value chain, regional economic integration, exchange rate movements, and balance of payments deficits.

ECON 7550 - International Economics II
3 credit hours Prerequisites: ECON 6530, ECON 7040, and ECON 7080. Applications-oriented course emphasizing quantitative tools to analyze policy issues related to international trade, exchange rates, sectoral resource allocation, and growth. Topics include an extended introduction to trade policy analysis using a general equilibrium modeling framework. Practical aspects of general equilibrium modeling emphasized and applied to a particular issue of interest, such as the impact of trade liberalization on labor markets and growth or the impact of trade and exchange rate distortions on resource allocation and growth.

ECON 7640 - Dissertation Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. S/U grading.

ECON 7660 - History of Economic Thought
3 credit hours Prerequisites: Graduate status and proficiency in reading and writing English. Examines the history of Western economics beginning with the ancient Greeks, including the medieval scholastics, the early modern mercantilists, and selected thinkers from classical liberal economics, socialism, the historical and institutionalist schools of economics, neoclassical economics, and contemporary economics.

ECON 7710 - Monetary Economics I
3 credit hours Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Provides an integrated treatment of a variety of dynamic optimization and dynamic equilibrium models and examines their empirical implications for individual choices and, in particular, savings and asset prices. Three frameworks studied: infinitely lived representative agent models, heterogenous agent models, and representative and heterogenous agent models with financial frictions. Advanced numerical solution methods and panel data estimation techniques also incorporated.

ECON 7725 - Asset Pricing
3 credit hours Prerequisites: ECON 7040 and ECON 7090. Theoretical and empirical research in asset pricing. Topics include debt and equity valuation, securities markets, and portfolio theory.

ECON 7730 - Corporate Finance
3 credit hours Prerequisite: ECON 7725. Theoretical and empirical research in corporate finance. Specifically, an understanding of modern theories of capital structure, dividend policy, corporate control and governance, investment banking, and capital budgeting. Emerging areas of research such as Fintech, market microstructure, venture capital financing, and comparative international corporate finance.

ECON 7810 - Industrial Organization I
3 credit hours Prerequisite: Must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Serves as the first half of the graduate sequence in industrial organization, in which microeconomic models are used to study topics related to firm strategy and market structure. Emphasis on preparing students to conduct their own research, introduces students to current methods and techniques in a variety of research areas within the field of industrial organization.

ECON 7820 - Industrial Organization II
3 credit hours Prerequisite: Must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Serves as the second half of the graduate sequence in industrial organization, in which microeconomic models are used to study topics

related to firm strategy and market structure. Aim is to improve students' economic modeling and econometric skills in order to prepare them to conduct independent research. Students will make extensive use of statistical software packages such as MATLAB and STATA.

ECON 7900 - Research Seminar
3 credit hours Prerequisites: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Students practice writing academic papers, critiques, and monographs in economics and finance with some emphasis on developing a viable dissertation proposal. Incorporates a detailed discussion of essential steps in the publication process such as identifying a topic, fitting it into the literature, developing a theoretical background, preparing the data, choosing an appropriate methodology, and presenting the results, as well as pitfalls to avoid in working on dissertations and academic papers.

ECON 7950 - Instructional Development and Practice in Economics
3 credit hours Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Workshop environment where students present key economic concepts, use new technology, organize and structure courses and individual classes, use assessment tools, and deal with conflict in the classroom. Offers preparation to teach undergraduate classes in economics.

Finance

FIN 5360 - Management of Financial Institutions
3 credit hours Prerequisite: FIN 3210 or equivalent or consent of instructor. Application of principles of institution management with a focus on operations, policy making, asset, liability, and capital management of commercial banks and nonbank financial institutions.

FIN 5430 - Real Property Valuation
3 credit hours Prerequisite: FIN 2450 or consent of instructor; FIN 3010 strongly recommended. Theory and methods of real property valuation. Qualitative and quantitative analysis incorporated to appraise residential and income-producing properties. Comparable sales, cost-depreciation, and income capitalization analysis emphasized.

FIN 5590 - Independent Study in Real Estate
3 credit hours Current controversial conditions in the field of real estate with concentration on major problems and policies in managing real estate and other related resources.

FIN 5710 - Insurance in Estate Planning
3 credit hours Prerequisite: FIN 3610 or permission of instructor. Insurance as it may relate to estate planning examined in detail. Focus on estate planning principles including the problems of estate liquidity, taxation, governmental regulation, and costs involved in handling estates. Also included are ownership provisions and beneficiary designations, settlement options, and trusts.

FIN 5750 - Risk Management
3 credit hours Prerequisite: FIN 3610 or permission of instructor. Analysis of major sources of liability loss exposures and the insurance coverages designed to meet those exposures. Noninsurance techniques such as loss control and risk transfer are also discussed.

FIN 5790 - Independent Study in Insurance
3 credit hours Prerequisite: FIN 3610 or permission of instructor. Application of various insurance coverages to fulfillment of personal, business, and social needs. Special problems are chosen or assigned in areas of the student's interest in joint consultation between student and instructor.

FIN 5840 - Study Abroad
3 credit hours Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

FIN 5890 - Internship in Finance
3 credit hours Prerequisite: Graduate status and recommendation of advisor. Supervised work experience in cooperating business firms or government agencies together with specialized academic study relating to the work experience. Pass/Fail.

FIN 5900 - TVA Investment Challenge
3 credit hours Theories and concepts related to investing, security analysis, and portfolio management will be put to the test in the management of a real portfolio of stocks. TVA investment guidelines, portfolio management strategies, stock selection, investment gurus, individual investment styles, data sources and Internet sites, stock-screening techniques, and portfolio rebalancing.

FIN 5990 - Independent Study in Finance
1 to 3 credit hours Chosen in joint consultation between student and instructor.

FIN 6000 - Survey of Financial Management
3 credit hours Principles and tools of financial management including time value of money, security valuation, funds acquisition and capital budgeting, and cost of capital. May not be used for elective credit in graduate business degree programs.

FIN 6010 - Foundations of Finance
3 credit hours For Finance M.S. students only. Provides an introduction to finance at the graduate level. Topics include the time value of money, valuation of debt and equity, risk and return, financial statements, and capital budgeting.

FIN 6060 - Financial Econometrics
3 credit hours (Same as ECON 6060.) Prerequisite: FIN 6010. Econometrics for students pursuing a M.S. in Finance. Focuses on ordinary least squares regression analysis. Statistical software used as a tool for manipulating data, conducting forecasts, and performing statistical inference.

FIN 6099 - Special Topics in Finance
3 credit hours Prerequisite: Permission of instructor. An in-depth study of a special topic in finance. Interested students should contact the instructor for specifics.

FIN 6110 - Financial Modeling
3 credit hours Prerequisites: Admission to the Master of Science in Finance program. Includes mathematical, programming, and statistical tools used in the real-world analysis and modeling of financial data; applies these tools to model asset prices and returns, to measure risk, and to construct optimized portfolios. Examines real-world problems faced by investment advisors, consultants, and investors in putting finance theory into practice.

FIN 6430 - Public Finance
3 credit hours (Same as ECON 6430.) Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance, health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.

FIN 6450 - Monetary Policy
3 credit hours (Same as ECON 6450.) Prerequisite: ECON 3210 or equivalent recommended. Objectives and limitations of monetary policy, alternative monetary theories underlying policy decisions and the controversy among theories, transmission channels of monetary policy, alternative strategies used to achieve the objectives of monetary policy, practical considerations in the execution of monetary policy, global linkages and monetary policy, and the effects and consequences of policy decision on economic activity and business decisions.

FIN 6460 - Investments
3 credit hours (Same as ECON 6460.) Prerequisites: FIN 6010 and FIN 6110. Focuses on the pricing of equity and debt securities using discounted cash flow, relative valuation, and the Black-Scholes real option valuation approaches in the top-down analysis framework. Focuses on analyzing the macroeconomic environment, forecasting short-term and long-term stock market trends, performing industry analysis, identifying the key value drivers for the industry and stocks, interpreting accounting and non-accounting information necessary for valuation, establishing assumptions for valuation models, applying valuation quantitative models in the stock research project, and presenting equity research in a professional manner.

FIN 6550 - Real Estate Finance and Investment
3 credit hours Development of a framework for making real estate finance and investment decisions and for analyzing real estate finance and investment alternatives.

FIN 6560 - Mergers and Acquisitions
3 credit hours (Same as ECON 6560.) Prerequisites: FIN 6010 and FIN 6110. Issues covered include the

reasons firms merge, buyer and seller motivations, the assessment of merger prospect value, merger waves and their consequences, the concentration of economic power resulting from mergers, policies toward mergers, the effects of takeover defenses, and the effects of mergers on the economy.

FIN 6710 - Financial Statement Analysis
3 credit hours Prerequisites: FIN 6010 with C or better. Theory of corporate finance with applications. Techniques and problems for maximizing wealth through the application of discounted cash flow analysis. Emphasis on risk, capital budgeting, and capital structure.

FIN 6730 - Financial Institutions and Markets
3 credit hours (Same as ECON 6730.) Prerequisites: FIN 6010 and FIN 6110. Focuses on the common and distinctive aspects of the provision of financial services and the management of risk associated with those services. Roles, characteristics, and operation of financial institutions, constraints that these institutions face in meeting that objective, regulatory environment within which they operate, risks they face and the management of those risks, evolution of the financial industry over time, and the causes and reactions to financial crises throughout the world.

FIN 6740 - Bond Market Analysis
3 credit hours Prerequisites: FIN 6010 and FIN 6110. Analyzes fixed income securities. Uncovers innovations in bond markets, preparing students for careers in bond markets. Demonstrates active portfolio management and the analysis of yield spread trades in cash and futures markets. Approximates bond price using duration and convexity. Bonds with imbedded options, such as collateralized mortgage obligations, floaters and inverse floaters, and other derivatives, are financially engineered from the underlying fixed income securities.

FIN 6750 - Corporate Finance
3 credit hours Prerequisites: FIN 6010 and FIN 6110. Topics include ethical decision making, advanced risk analysis, advanced project analysis, advanced capital structure concepts, valuation techniques, and cash flow analysis.

FIN 6760 - Derivatives Valuation
3 credit hours Prerequisites: FIN 6010 and FIN 6110. Explores and analyzes the key issues associated with theory and practice of derivatives instruments. Includes advanced topics dealing with pricing, risk management, and structuring of global derivatives products such as options, forwards, futures, swaps, caps, collars, and swaptions in the equity, foreign exchange, commodities, and interest-rate markets.

FIN 6780 - Portfolio Analysis
3 credit hours Prerequisites: FIN 6010 and FIN 6110. Focuses on both theoretical and practical aspects of investment analysis, security selection, and portfolio management. Topics include asset allocation, investment policy statement, mean variance optimization, contemporary asset pricing theories, equity and fixed-income portfolio strategies, managing interest rate risk and credit risk, using derivatives in portfolio management, and alternative investment.

FIN 6860 - International Financial Management
3 credit hours Prerequisites: FIN 6010 and FIN 6110. International capital markets, exchange rate exposure, risk management, and other multinational finance issues. Essential not only for United States exporters, but also for those facing competition from abroad.

FIN 6920 - Cases in Finance
3 credit hours Prerequisites: FIN 6460 and FIN 6750. Applications-oriented approach to managerial problem-solving. Topics may include working capital management, capital budgeting, cost of capital estimation, lease/purchase decisions, bond refunding, and international issues.

FIN 6990 - Independent Study in Finance
1 to 3 credit hours Independent readings-based study of a particular topic in finance selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered.

FIN 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

MBA Economics

MBAE 6865 - Economic Decisions for Managers
2 credit hours Prerequisites: FIN 3000 or FIN 3010 and ACTG 2110 and ACTG 2120 or ACTG 2110 and ACTG 2125 or ACTG 3000; BIA 6000 or equivalent. Focuses on the applications of microeconomic principles for making rational management analysis and decisions. Covers the guiding principles undergirding demand, supply, cost theories, and their relevance to business strategic pricing and output decisions. Explores the interaction of information, economic incentives, market competition, and how these interact to determine prices, products, profits, and patterns of trade and organization.

MBA Finance

MBAF 6845 - Managerial Finance
2 credit hours Prerequisites: ACTG 3000 or equivalent, FIN 3010 or FIN 3000 or equivalent, and BIA 6000 or equivalent. Topics include the manager's role in corporate planning, evaluating capital investment proposals, measuring managerial performance, performing cash flow analysis, interpreting and evaluating financial information, and applying the capital asset pricing modeling (CAPM). Not open to students enrolled in the M.S. in Finance program.

MBAF 6885 - Decision Making in Accounting and Finance
3 credit hours (Same as MBAA 6885.) Prerequisites: MBAA 6815 and MBAF 6845. An integrative course in decision making in accounting and finance for MBA students. Topics include financial statement analysis, financial distress and bankruptcy, efficient markets, contracting and agency, and risk analysis.

Information Systems and Analytics

Timothy Greer, Chair
(615) 898-5055
www.mtsu.edu/isa/

The Information Systems and Analytics department offers the Master of Science in Information Systems with concentrations in Business Intelligence and Analytics, Information Security and Assurance, and IT Project Management. Core and elective classes may also be combined to form a strong foundation in database-related topics.

The department also offers courses for the Master of Business Administration degree and a minor in Information Systems for students seeking a master's degree other than the M.B.A.

Information Systems Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 approved semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 approved semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Information Systems, Business Intelligence and Analytics Concentration, M.S.

Amy Harris, Program Director
615-904-8178
Amy.Harris@mtsu.edu
The Information Systems and Analytics department offers the Master of Science in Information Systems with concentrations in Information Security and Assurance, IT Project Management, and Business Intelligence and Analytics. Core and elective classes may also be combined to form a strong foundation in database-related topics. The department also offers courses for the Master of Business Administration degree and a minor in Information Systems for students seeking a master's degree other than the M.B.A.
The graduate program director serves as advisor for students majoring in Information Systems. Prospective students are encouraged to contact the graduate program director or the department to discuss the program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants must have earned a bachelor's degree from a regionally accredited college or university with a GPA of 2.75 or higher and a minimum index score of 1000, calculated using (GPA x 200) + GMAT (or GRE equivalent).
The GMAT/GRE requirement may be waived for applicants meeting any of the following conditions:

1. an earned bachelor's degree from a regionally accredited college or university with a GPA of 3.00 or higher;
2. an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial or military experience;
3. an earned graduate or professional degree from a regionally accredited college or university.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official GMAT scores.
3. submit official transcripts showing a GPA in previous academic work.

Degree Requirements

The Master of Science in Information Systems with a concentration in Business Intelligence and Analytics requires completion of 30 semester hours. INFS 6980 must be passed with a grade of B- or higher with a maximum enrollment of two times. The degree is to be completed within six years from the time of admission to the degree program.

Curriculum: Information Systems, Business Intelligence and Analytics

The following illustrates the coursework requirements.

Required Courses (12 hours)

- BIA 6905 - Applied Business Analytics **3 credit hours**
- INFS 6700 - IT Project Management: Strategies for Success **3 credit hours**
- INFS 6790 - Seminar in Database Management **3 credit hours**
- INFS 6980 - ISA Capstone **3 credit hours** *
  *** Must be taken in last semester; must make B- or higher; may repeat only once.**

Concentration (9 hours)

- BIA 6910 - Business Intelligence **3 credit hours**
- BIA 6920 - Data Mining and Predictive Analytics **3 credit hours**
- INFS 6810 - Big Data for Analytics **3 credit hours**

Electives (9 hours)

- Three hours of approved courses at the 6000 level
- Six hours of approved courses at the 5000 or 6000 level

If a student does not have INFS 4790 or INFS 5790 or equivalent, then one of the electives must be INFS 5790.
Choose from:

- INFS 5790 - Database Design and Development **3 credit hours**
- INFS 5830 - Database Programming **3 credit hours**
- INFS 5840 - Study Abroad **3 credit hours**
- INFS 5900 - Business Data Communications **3 credit hours**
- INFS 6190 - SQL for ETL and Analytics **3 credit hours**
- INFS 6200 - Modeling for Problem Solving **3 credit hours**
- INFS 6300 - Management of Security Operations **3 credit hours**
- INFS 6301 - Vulnerability Management and Penetration Testing **3 credit hours**
- INFS 6302 - Security Analytics **3 credit hours**
- INFS 6701 - IT Project Risk and Recovery **3 credit hours**
- INFS 6702 - IT Project Planning and Implementation **3 credit hours**

Program Notes

No more than two (2) 5000-level classes may be taken as part of the degree program.
Students planning to graduate in the minimum amount of time, including summer attendance, should plan their programs carefully in order to meet course sequencing and scheduling constraints. The program director can provide scheduling assistance.
A limited number of graduate assistantships are available on a competitive basis to qualified students.
No foreign language or thesis is required in the program.
INFS 6750 may not be taken to satisfy either a required or elective course in the program.
Students without an undergraduate degree in information systems or demonstrable professional experience in the discipline are required to complete the additional prerequisites of INFS 2600, INFS 3800 (or INFS 6000), and INFS 4790 (or INFS 5790). INFS 5790 may be taken for credit toward the graduate degree. Students without formal training or experience in IT may be encouraged to take some additional INFS courses. A portion of these requirements may be satisfied in conjunction with the student's graduate studies.

Information Systems, Information Security and Assurance Concentration, M.S.

Amy Harris, Program Director
615-904-8178
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The Information Systems and Analytics department offers the Master of Science in Information Systems with concentrations in Information Security and Assurance, IT Project Management, and Business Intelligence and Analytics. Core and elective classes may also be combined to form a strong foundation in database-related topics. The department also offers courses for the Master of Business Administration degree and a minor in Information Systems for students seeking a master's degree other than the M.B.A.
The graduate program director serves as advisor for students majoring in Information Systems. Prospective students are encouraged to contact the graduate program director or the department to discuss the program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants must have earned a bachelors degree from a regionally accredited college or university with a GPA of 2.75 or higher and a minimum index score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).
The GMAT/GRE requirement may be waived for applicants meeting any of the following conditions:

1. an earned bachelor's degree from a regionally accredited college or university with GPA of 3.00 or higher;
2. an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial or military experience;
3. an earned graduate or professional degree from a regionally accredited college or university.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official GMAT scores.
3. submit official transcripts showing a GPA in previous academic work.

Degree Requirements

The Master of Science in Information Systems with a concentration in Information Security and Assurance requires completion of 30 semester hours. INFS 6980 must be passed with a grade of B- or higher with a maximum enrollment of two times. The degree is to be completed within six years from the time of admission to the degree program.

Curriculum: Information Systems, Information Security and Assurance

The following illustrates the coursework requirements.

Required Courses (12 hours)

- BIA 6905 - Applied Business Analytics **3 credit hours**
- INFS 6700 - IT Project Management: Strategies for Success **3 credit hours**
- INFS 6790 - Seminar in Database Management **3 credit hours**
- INFS 6980 - ISA Capstone **3 credit hours** *
  *** Must be taken in last semester; must make B- or higher; may repeat only once.**

Concentration (9 hours)

- INFS 6300 - Management of Security Operations **3 credit hours**
- INFS 6301 - Vulnerability Management and Penetration Testing **3 credit hours**
- INFS 6302 - Security Analytics **3 credit hours**

Electives (9 hours)

- Three hours of approved courses at the 6000 level
- Six hours of approved courses at the 5000 or 6000 level

If a student does not have INFS 4790 or INFS 5790 or equivalent, then one of the electives must be INFS 5790.
Choose from:

- INFS 5790 - Database Design and Development **3 credit hours**
- INFS 5830 - Database Programming **3 credit hours**
- INFS 5840 - Study Abroad **3 credit hours**
- INFS 5900 - Business Data Communications **3 credit hours**
- INFS 6190 - SQL for ETL and Analytics **3 credit hours**
- INFS 6200 - Modeling for Problem Solving **3 credit hours**
- INFS 6701 - IT Project Risk and Recovery **3 credit hours**
- INFS 6702 - IT Project Planning and Implementation **3 credit hours**
- INFS 6810 - Big Data for Analytics **3 credit hours**
- BIA 6910 - Business Intelligence **3 credit hours**
- BIA 6920 - Data Mining and Predictive Analytics **3 credit hours**

Program Notes

No more than two (2) 5000-level classes may be taken as part of the degree program.
Students planning to graduate in the minimum amount of time, including summer attendance, should plan their programs carefully in order to meet course sequencing and scheduling constraints. The program director can provide scheduling assistance.
A limited number of graduate assistantships are available on a competitive basis to qualified students.
No foreign language or thesis is required in the program.
INFS 6750 may not be taken to satisfy either a required or elective course in the program.
Students without an undergraduate degree in information systems or demonstrable professional experience in the discipline are required to complete the additional prerequisites of INFS 2600, INFS 3800 (or INFS 6000), and INFS 4790 (or INFS 5790). INFS 5790 may be taken for credit toward the graduate degree. Students without formal

training or experience in IT may be encouraged to take some additional INFS courses. A portion of these requirements may be satisfied in conjunction with the student's graduate studies.

Information Systems, IT Project Management Concentration, M.S.

Amy Harris, Program Director
615-904-8178
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The Information Systems and Analytics department offers the Master of Science in Information Systems with concentrations in Information Security and Assurance, IT Project Management, and Business Intelligence and Analytics. Core and elective classes may also be combined to form a strong foundation in database-related topics. The department also offers courses for the Master of Business Administration degree and a minor in Information Systems for students seeking a master's degree other than the M.B.A.
The graduate program director serves as advisor for students majoring in Information Systems. Prospective students are encouraged to contact the graduate program director or department to discuss the program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants must have earned a bachelors degree from a regionally accredited college or university with a GPA of 2.75 or higher and a minimum index score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).
The GMAT/GRE requirement may be waived for applicants meeting any of the following conditions:

1. an earned bachelor's degree from a regionally accredited college or university with GPA of 3.00 or higher;
2. an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial or military experience;
3. an earned graduate or professional degree from a regionally accredited college or university.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official GMAT scores.
3. submit official transcripts showing a GPA in previous academic work.

Degree Requirements

The Master of Science in Information Systems with a concentration in IT Project Management requires completion of 30 semester hours. INFS 6980 must be passed with a grade of B- or higher with a maximum enrollment of two times. The degree is to be completed within six years from the time of admission to the degree program.

Curriculum: Information Systems, IT Project Management

The following illustrates the coursework requirements.

Required Courses (12 hours)

- BIA 6905 - Applied Business Analytics **3 credit hours**
- INFS 6700 - IT Project Management: Strategies for Success **3 credit hours**
- INFS 6790 - Seminar in Database Management **3 credit hours**
- INFS 6980 - ISA Capstone **3 credit hours** *
  *** Must be taken in last semester; must make B- or higher; may repeat only once.**

Concentration (9 hours)

- INFS 6701 - IT Project Risk and Recovery **3 credit hours**
- INFS 6702 - IT Project Planning and Implementation **3 credit hours**
- Approved INFS 6000-level elective **3 hours credit**

Electives (9 hours)

- Three hours of approved courses at the 6000 level
- Six hours of approved courses at the 5000 or 6000 level

If a student does not have INFS 4790 or INFS 5790 or equivalent, then one of the electives must be INFS 5790.
Choose from:

- INFS 5790 - Database Design and Development **3 credit hours**
- INFS 5830 - Database Programming **3 credit hours**
- INFS 5840 - Study Abroad **3 credit hours**
- INFS 5900 - Business Data Communications **3 credit hours**
- INFS 6190 - SQL for ETL and Analytics **3 credit hours**
- INFS 6200 - Modeling for Problem Solving **3 credit hours**
- INFS 6300 - Management of Security Operations **3 credit hours**
- INFS 6301 - Vulnerability Management and Penetration Testing **3 credit hours**
- INFS 6302 - Security Analytics **3 credit hours**
- INFS 6810 - Big Data for Analytics **3 credit hours**

Program Notes

No more than two (2) 5000-level classes may be taken as part of the degree program.
Students planning to graduate in the minimum amount of time, including summer attendance, should plan their programs carefully in order to meet course sequencing and scheduling constraints. The program director can provide scheduling assistance.
A limited number of graduate assistantships are available on a competitive basis to qualified students.
INFS 6750 may not be taken to satisfy either a required or elective course in the program.
No foreign language or thesis is required in the program. may not be taken to satisfy either a required or elective course in the program.
Students without an undergraduate degree in information systems or demonstrable professional experience in the discipline are required to complete the additional prerequisites of INFS 2600, INFS 3800 (or INFS 6000), and INFS 4790 (or INFS 5790). INFS 5790 may be taken for credit toward the graduate degree. Students without formal training or experience in IT may be encouraged to take some additional INFS courses. A portion of these requirements may be satisfied in conjunction with the student's graduate studies.

Information Systems, M.S.

Amy Harris, Program Director
615-904-8178
Amy.Harris@mtsu.edu
The Information Systems and Analytics department offers the Master of Science in Information Systems with concentrations in Information Security and Assurance, IT Project Management, and Business Intelligence and Analytics. Core and elective classes may also be combined to form a strong foundation in database-related topics. The department also offers courses for the Master of Business Administration degree and a minor in Information Systems for students seeking a master's degree other than the M.B.A.
The graduate program director serves as advisor for students majoring in Information Systems. Prospective students are encouraged to contact the graduate program director or the department to discuss the program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants must have earned a bachelors degree from a regionally accredited college or university with a GPA of 2.75 or higher and a minimum index score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).
The GMAT/GRE requirement may be waived for applicants meeting any of the following conditions:

1. an earned bachelor's degree from a regionally accredited college or university with GPA of 3.00 or higher;
2. an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial or military experience;
3. an earned graduate or professional degree from a regionally accredited college or university.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official GMAT scores.
3. submit official transcripts showing a GPA in previous academic work.

Degree Requirements

The Master of Science in Information Systems with a concentration in General Information Systems requires completion of 30 semester hours. INFS 6980 must be passed with a grade of B- or higher with a maximum enrollment of two times. The degree is to be completed within six years from the time of admission to the degree program.

Curriculum: Information Systems

The following illustrates the coursework requirements.

Required Courses (12 hours)

- BIA 6905 - Applied Business Analytics **3 credit hours**
- INFS 6700 - IT Project Management: Strategies for Success **3 credit hours**
- INFS 6790 - Seminar in Database Management **3 credit hours**
- INFS 6980 - ISA Capstone **3 credit hours** *
  *** Must be taken in last semester; must make B- or higher; may repeat only once.**

Approved Electives (18 hours)

- Twelve hours of approved courses at the 6000 level
- Six hours of approved courses at the 5000 or 6000 level

If a student does not have INFS 4790 or INFS 5790 or equivalent, then one of the electives must be INFS 5790.
Choose from:

- INFS 5790 - Database Design and Development **3 credit hours**
- INFS 5830 - Database Programming **3 credit hours**
- INFS 5900 - Business Data Communications **3 credit hours**
- INFS 6190 - SQL for ETL and Analytics **3 credit hours**
- INFS 6200 - Modeling for Problem Solving **3 credit hours**
- INFS 6300 - Management of Security Operations **3 credit hours**
- INFS 6301 - Vulnerability Management and Penetration Testing **3 credit hours**
- INFS 6302 - Security Analytics **3 credit hours**
- INFS 6701 - IT Project Risk and Recovery **3 credit hours**
- INFS 6702 - IT Project Planning and Implementation **3 credit hours**
- INFS 6810 - Big Data for Analytics **3 credit hours**
- BIA 6910 - Business Intelligence **3 credit hours**
- BIA 6920 - Data Mining and Predictive Analytics **3 credit hours**

Program Notes

No more than two (2) 5000-level classes may be taken as part of the degree program.
Students planning to graduate in the minimum amount of time, including summer attendance, should plan their programs carefully in order to meet course sequencing and scheduling constraints. The program director can provide scheduling assistance.
A limited number of graduate assistantships are available on a competitive basis to qualified students.
No foreign language or thesis is required in the program.
INFS 6750 may not be taken to satisfy either a required or elective course in the program.
Students without an undergraduate degree in information systems or demonstrable professional experience in the discipline are required to complete the additional prerequisites of INFS 2600, INFS 3800 (or INFS 6000), and INFS 4790 (or INFS 5790). INFS 5790 may be taken for credit toward the graduate degree. Students without formal training or experience in IT may be encouraged to take some additional INFS courses. A portion of these requirements may be satisfied in conjunction with the student's graduate studies.

Business Intelligence and Analytics

BIA 6000 - Quantitative Methods Survey
3 credit hours Quantitative methodologies to assist in the decision-making process. Emphasis on applied statistics and decision sciences topics that are practical, useful, and of wide application for business analysis. **May not be used for elective credit in graduate business degree program.**

BIA 6905 - Applied Business Analytics
3 credit hours (Same as MBAI 6905.) An applied approach to the understanding, development, and application of prescriptive and data analytic tools to model and analyze business data. A hands-on focus utilized with both commonly-used spreadsheet software and specialized business intelligence software for the student to develop skills for self-service business analytics.

BIA 6910 - Business Intelligence
3 credit hours Prerequisite: BIA 6905 or QM 6770 or equivalent. A more advanced look at the application of business intelligence tools to solving business problems. Coverage will include the development and deployment of sophisticated reporting and dashboard systems to monitor and manage operations. Industry-standard business intelligence software utilized.

BIA 6920 - Data Mining and Predictive Analytics
3 credit hours Prerequisite: INFS 5790. Principles and techniques of exploring large sets of data for discovery and prediction. Sophisticated business intelligence software used in forecasting, clustering, and classifying problems encountered in business. Emphasis on developing applied skills along with a "data analytic" thought process.

Information Systems

INFS 5790 - Database Design and Development
3 credit hours Prerequisite: 6 hours of information systems. Fundamental concepts: conventional data systems, integrated management information systems, database structure systems, data integration, complex file structure, online access systems. Emphasis on total integrated information systems database and database management languages.

INFS 5830 - Database Programming
3 credit hours Prerequisite: INFS 4790 or INFS 5790 with minimum grade of C- or consent of instructor. Advanced SQL programming to support ETL database operations. Primary focus on transforming existing database data through a variety of parsing, cleaning, and aggregating SQL functions and techniques. Some coverage of developing stored procedures and functions using a database language, such as PL/SQL included.

INFS 5840 - Study Abroad
3 credit hours Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

INFS 5900 - Business Data Communications
3 credit hours Prerequisites: 6 hours of information systems. Current topics in the field of data communications.

INFS 6000 - Information Systems Survey
3 credit hours Survey of information systems used to solve business problems. Topics will include but not limited to the basic components of an information systems, the systems development life cycle, and data communications technologies. **May not be used for elective credit in graduate business degree program.**

INFS 6190 - SQL for ETL and Analytics
3 credit hours Prerequisite: INFS 4790 or INFS 5790 with C or better. Advanced SQL programming with a focus on the functions and techniques to support ETL and analytic processes. Students engage in intensive hands-on and self-directed programming activities.

INFS 6200 - Modeling for Problem Solving
3 credit hours Implements a hands-on approach to model development using electronic spreadsheets emphasizing problem solving in decision-making situations. Includes the development and application of extensive spreadsheet skills in modeling.

INFS 6300 - Management of Security Operations
3 credit hours Management of the information systems security function which includes understanding policy, governance, risk, and the application of appropriate solutions required to protect and enhance an organization's security posture. Topics include threats to security, risk assessment, application and data hardening, network security, fundamentals of encryption and authentication systems, and the application of appropriate response and recovery techniques necessary for business continuity.

INFS 6301 - Vulnerability Management and Penetration Testing
3 credit hours Management of methodologies and procedures to discover vulnerabilities, to recommend solutions for tightening information security, and to protect organization data. Students will use various penetration testing methodologies, frameworks, tools, and techniques to exploit vulnerabilities. Topics include vulnerability assessment, penetration testing, social engineering, reconnaissance, and legal implications as well as network scanning.

INFS 6302 - Security Analytics
3 credit hours Prerequisite: INFS 6300. Application of data analytics techniques to data housed in and produced from security devices and network systems to more accurately manage and secure applications as well as the entire infrastructure. Students will examine various tools to properly manage, analyze, and use security and system data to make appropriate decisions related to the security function. Specific topics include behavior analytics, threat hunting, incident management, and incident response.

INFS 6520 - IT Project Management Case Studies
3 credit hours Integrates all areas of IT project management into a coherent analysis. Covers topics, situations, and problems using case study techniques. Includes the development of project management software skills.

INFS 6610 - Information Systems Management and Applications
3 credit hours Focuses on the use of computing resources in managerial context. Students will develop an understanding of issues and implications of information resources and end-user computing as well as develop skills in application of these concepts in a problem-solving oriented microcomputer system environment. **NOT open to students with an undergraduate degree in Information Systems and not acceptable for the M.S. in Information Systems.**

INFS 6700 - IT Project Management: Strategies for Success
3 credit hours Addresses IT project management (ITPM) in the development of information systems and uses the project management body of knowledge (PMBOK) as the guiding framework. Emphasizes ITPM success factors, project manager and team roles, emotional intelligence, virtual teams, scope management, stakeholder management, and traditional and emerging ITPM approaches. Learning resources include current books, academic literature, professional resources, and class discussions.

INFS 6701 - IT Project Risk and Recovery
3 credit hours Applies current risk-management processes and standards to address the complex nature of IT projects. Emphasis on identifying, analyzing, and responding to IT project risk, recovering runaway projects, and using project management software to assist in risk evaluation and control.

INFS 6702 - IT Project Planning and Implementation
3 credit hours Prerequisite: INFS 6700. Builds on knowledge of project management concepts, techniques and challenges developed in INFS 6700. Introduces advanced planning and management techniques in the context of contemporary project management challenges, theories, techniques, and practices.

INFS 6720 - Knowledge Management
3 credit hours Strategic value of knowledge as a critical organizational asset, design of effective knowledge management systems, and implementation of knowledge management programs for organizations operating in the highly competitive knowledge economy.

INFS 6750 - Global Strategic Information Systems
3 credit hours Examines the managerial, operational, and strategic implications of information and communication technology in the global context. Particular emphasis on the strategic dimension. Not open to students in the M.S. in Information Systems degree program.

INFS 6790 - Seminar in Database Management
3 credit hours Prerequisite: INFS 4790 or INFS 5790 with minimum grade of C. Advanced topics in computer-related information systems as found in current literature and practical application. Advanced information structures and data management concepts applied in the design of computer-based information systems. Additional topics include data structures as applied to distributed processing systems, computer system component resource allocation, and data communication systems design. Significant computer application projects required.

INFS 6810 - Big Data for Analytics
3 credit hours Prerequisite: INFS 6790 with minimum grade of C. Fundamental concepts in big data as an organizational resource. Survey of the technologies required to support big data, and the management and manipulation of big data to support business intelligence and analytic efforts.

INFS 6835 - IT Applications for Decision Making
2 credit hours (Same as MBAI 6835.) Focuses on application development using electronic spreadsheets to improve decision making efficiency and effectiveness. Uses a hands-on approach to develop skills in electronic spreadsheets and modeling applied to a variety of business situations. Not acceptable for credit toward the degree requirements for the M.S. in Information Systems but may be required as a prerequisite at the discretion of the program coordinator.

INFS 6980 - ISA Capstone
3 credit hours Prerequisite: 6 hours of information systems or permission of instructor. Emphasizes communication skills, creative thinking, problem solving, and professional responsibility from a leadership perspective. Includes the discussion of information systems assessment in organizations. Capstone course for Information Systems majors and must be taken the last semester prior to graduation.

INFS 6990 - Independent Research in Information Systems
1 to 3 credit hours Prerequisite: Consent of graduate program coordinator or department chair. Provides individual research, readings analysis, or projects in contemporary problems and issues in a concentrated area of study under the direction of an appropriate faculty member. Maximum credit applicable toward degree may not exceed six credits.

INFS 6991 - Independent Research in Information Systems
3 credit hours Prerequisite: Consent of graduate program coordinator or department chair. Provides individual research, readings analysis, or projects in contemporary problems and issues in a concentrated area of study under the direction of an appropriate faculty member. Maximum credit applicable toward degree may not exceed six credits.

MBA Information Systems

MBAI 6835 - IT Applications for Decision Making
2 credit hours (Same as INFS 6835.)
Prerequisite: BIA 6000 or BIA 2610 and 3620. Focuses on application development using electronic spreadsheets to improve decision making efficiency and effectiveness. Uses a hands-on approach to develop skills in electronic spreadsheets and modeling applied to a variety of business situations. Not acceptable for credit toward the degree requirements for the M.S. in Information Systems but may be required as a prerequisite at the discretion of the program coordinator.

MBAI 6855 - Information Systems
2 credit hours Focuses on the basic concepts of using and managing information across the enterprise. How information systems may help, hinder, or create opportunities for organizations; makes students aware they must be knowledgeable participants in various roles as they relate to information and the information systems function. Not accepted for credit toward the M.S. in Information Systems program.

MBAI 6905 - Applied Business Analytics
3 credit hours (Same as BIA 6905.) Prerequisites: BIA 6000 and MBAI 6835 or BIA 2610 and BIA 3620; permission of department. An applied approach to the understanding, development, and application of prescriptive and data analytic tools to model and analyze business data. A hands-on focus utilized with both commonly-used spreadsheet software and specialized business intelligence software for the student to develop skills for self-service business analytics.

Quantitative Methods

QM 6770 - Computer-Based Decision Modeling
3 credit hours Advanced techniques in quantitative methods. Modeling and optimization techniques. Computer applications emphasized.

Management

Jill Austin, Chair
(615) 898-2736
www.mtsu.edu/management/
The Department of Management offers a Master of Science degree in Management with concentrations in Organizational Leadership and Supply Chain Management. The department also offers courses in management as part of the Master of Business Administration degree. A graduate certificate in Health Care Management is also offered.

Health Care Management Certificate

Millicent Nelson, Program Director
(615) 898-2033
M.Nelson@mtsu.edu
The curriculum of the certificate program in Health Care Management is designed to (1) offer support for individuals interested in the health care field who may or may not want to pursue a graduate degree to obtain recognition for a coherent body of graduate-level study in the field of health care management, (2) provide for interdisciplinary collaboration in teaching, learning, and practice, and (3) encourage qualified students to pursue graduate degrees related to their specific field of interest or practice.

Admission Requirements

Admission to the Health Care Management certificate program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average in all college work taken.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.

Certificate Requirements

Candidate must

1. complete 18 hours of graduate courses (see Curriculum section below for specifics);
2. maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate.

Curriculum: Health Care Management

Candidate must complete 18 hours in the following course of study:

Required Core (9 hours)

- MGMT 6000 - Management and Operations Concepts **3 credit hours**
- MGMT 6780 - Health Care Management **3 credit hours**
- HLTH 6510 - The Nation's Health **3 credit hours**

Electives (9 hours)

Student should select 9 hours from the following courses in conjunction with career goals and aspirations.

- ECON 6400 - Health Economics **3 credit hours**
- HLTH 6850 - Methods in Epidemiology **3 credit hours**
- HLTH 6860 - Program Planning for Health Promotion **3 credit hours**
- MGMT 6750 - Business Ethics **3 credit hours**
- MKT 6900 - Health Care Marketing **3 credit hours**

- SOC 5020 - Sociology of Aging **3 credit hours**
- SOC 5030 - Topics in Gerontology **3 credit hours**
- SOC 5040 - Health Care Delivery Issues **3 credit hours**

Program Notes

Students may transfer up to six (6) credit hours of approved coursework into the certificate program. The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.

Management, M.S., ABM Pathway

Dan Morrell, Program Director
(615) 494-7758
Dan.Morrell@mtsu.edu
The Department of Management offers an Accelerated Bachelors to Masters Pathway in Management, M.S., corresponding to the Management, B.B.A.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

Students must choose 3 credit hours from the chart below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

MTSU Undergraduate Course	MTSU Graduate Course	Credit Hours
MGMT 3640 - Managing Key Performance Indicators	MGMT 6700 - Supply Chain Key Performance Indicators	3
MGMT 3810 - Human Resources Management	MGMT 6680 - Seminar in Human Resources Management	3
MGMT 3940 - Business Ethics	MGMT 6750 - Business Ethics	3
MGMT 4680 - Organization Behavior	MGMT 6600 - Organization Behavior	3

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Management, Organizational Leadership Concentration, M.S.

Dan Morrell, Program Director
(615) 494-7758
Dan.Morrell@mtsu.edu
The Department of Management offers the Master of Science in Management program with concentrations in Organizational Leadership and Supply Chain Management. The Master of Science in Management enhances students' planning, communication, and ethical decision-making skills and exposes them to real world experiences that help them mature as managers. The Management M.S. program allows students to develop the skills to be promoted into higher levels of management at different types of organizations.
Graduates of this program may work in a variety of positions, including mid-to upper-level management positions in corporate offices, healthcare facilities, distribution or logistics centers, manufacturing facilities, not-for-profit organizations, state or local government, and service industries such as banking, insurance, and real-estate.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

To be admitted to the Master of Science in Management program, applicants should have

1. an earned bachelor's degree from a regionally accredited college or university with a GPA of 2.75 or higher; and
2. a minimum Index Score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).

The GMAT/GRE requirement may be waived for applicants that meet any of the following conditions:

- an earned bachelor's degree from a regionally accredited college or university with GPA 3.0 or higher
- an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial or military experience
- an earned graduate or professional degree from a regionally accredited college or university

Foundation Courses

Completion of required foundational course: MGMT 6000 (or MGMT 3610 and MGMT 3620). Applicants without this course(s) may complete as part of their program of study.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Management Admissions Test (GMAT) or the Graduate Record Examination (GRE);
3. submit official transcripts of all previous college work;
4. submit a current resume' or curriculum vita.

Degree Requirements

The Master of Science in Management with a concentration in Organizational Leadership requires completion of 33 semester hours.
Candidate must

1. complete 33 semester hours as listed below. No more than 30 percent of the total degree hours dual-listed as 5000-level undergraduate/graduate hours can be counted toward the degree;
2. successfully complete an applied project (MGMT 6800) in the last semester.

Curriculum: Management, Organizational Leadership

The Organizational Leadership concentration provides students with business and leadership skills that can be applied in a variety of leadership roles in business, government, and/or education. In addition to 12 hours of core management courses, the concentration requires 12 hours of courses in behavioral aspects of leadership, including two required courses: organizational development and leadership and motivation. Leadership concentration electives (6 hours) are selected from among the following courses: negotiation, current issues in management, organization behavior, and international management. Students will also elect 6 hours of courses in a professional area that relates to their career interests.
The following illustrates the coursework requirements.

Core Courses (15 hours)

- MGMT 6100 - Strategic Decision Making **3 credit hours**
- MGMT 6200 - Lean Project Management Principles **3 credit hours**
- MGMT 6680 - Seminar in Human Resources Management **3 credit hours**
- MGMT 6750 - Business Ethics **3 credit hours**
- MGMT 6800 - Applied Management Project **3 credit hours**

Required Courses (12 hours)

- MGMT 6660 - Organization Development **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**

Choose two from the following:

- MGMT 6600 - Organization Behavior **3 credit hours**
- MGMT 6670 - Seminar in Negotiation **3 credit hours**
- MGMT 6690 - Current Issues in Management **3 credit hours**
- MGMT 6770 - International Management **3 credit hours**

Career electives (6 hours)

In consultation with their advisors, students will select and complete 6 hours of courses in a professional area that relates to their career interests, or they may select and complete 6 hours of business electives that apply to organizational leadership.

Management, Supply Chain Management Concentration, M.S.

Dan Morrell, Program Director
(615) 494-7758
Dan.Morrell@mtsu.edu
The Department of Management offers the Master of Science in Management program with concentrations in Organizational Leadership and Supply Chain Management. The Master of Science in Management enhances students' planning, communication, and ethical decision-making skills and exposes them to real world experiences that help them mature as managers. The Management M.S. program allows students to develop the skills to be promoted into higher levels of management at different types of organizations.
Graduates of this program may work in a variety of positions, including mid-to upper-level management positions in corporate offices, healthcare facilities, distribution or logistics centers, manufacturing facilities, not-for-profit organizations, state or local government, and service industries such as banking, insurance, and real-estate.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

To be admitted to the Master of Science in Management program, applicants should have

1. an earned bachelor's degree from a regionally accredited college or university with a GPA of 2.75 or higher; and
2. a minimum Index Score of 1000 calculated using (GPA x 200) + GMAT (or GRE equivalent).

The GMAT/GRE requirement may be waived for applicants that meet any of the following conditions:

- an earned bachelor's degree from a regionally accredited college or university with GPA 3.0 or higher
- an earned bachelor's degree with a GPA of 2.75 or higher and five (5) or more years of professional/managerial or military experience
- an earned graduate or professional degree from a regionally accredited college or university

Foundation Courses

Completion of required foundational course: MGMT 6000 (or MGMT 3610 and MGMT 3620). Applicants without this course(s) may complete as part of their program of study.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Management Admissions Test (GMAT) or the Graduate Record Examination (GRE);
3. submit official transcripts of all previous college work;
4. submit a current resume' or curriculum vita.

Degree Requirements

The Master of Science in Management with a concentration in Supply Chain Management requires completion of 33 credit hours.
Candidate must

1. complete 33 semester hours as listed below. No more than 30 percent of the total degree hours dual-listed as 5000-level undergraduate/graduate hours can be counted toward the degree;
2. successfully complete an applied project MGMT 6800) in the last semester.

Curriculum: Management, Supply Chain Management

The Supply Chain Management concentration provides students with business and operations management skills that can be applied to work in logistics, transportation, and supply chain management careers. In addition to 15 hours of core courses in management, the concentration requires 12 hours of courses in supply chain management, including two required courses: international supply chain management and total quality management. The concentration electives are selected from among these courses: distribution center management, marketing systems, continuous improvement, applied business analytics, and supply chain operations. Students will also elect 6 hours of courses in a professional area that relates to their career interests.
The following illustrates the coursework requirements.

Core Courses (15 hours)

- MGMT 6100 - Strategic Decision Making **3 credit hours**
- MGMT 6200 - Lean Project Management Principles **3 credit hours**
- MGMT 6680 - Seminar in Human Resources Management **3 credit hours**
- MGMT 6750 - Business Ethics **3 credit hours**
- MGMT 6800 - Applied Management Project **3 credit hours**

Required Courses (12 hours)

- MGMT 6730 - International Supply Chain Management **3 credit hours**
- MGMT 6700 - Supply Chain Key Performance Indicators **3 credit hours**

Choose two from the following:

- MGMT 6550 - Distribution Center Management **3 credit hours**
- MGMT 6760 - Continuous Improvement/Problem Solving **3 credit hours**
- MKT 6830 - Marketing Systems **3 credit hours**
- MBAM 6875 - Supply Chain Operations **3 credit hours**
- BIA 6905 - Applied Business Analytics **3 credit hours**

Career Electives (6 hours)

In consultation with their advisors, students will select and complete 6 hours of courses in a professional area that relates to their career interests, or they may select and complete 6 hours of business electives that apply to supply chain management.

Business Administration

BUAD 6980 - Strategic Management
3 credit hours Advanced problem analysis requiring the synthesis of theory and practice gained from both the functional and managerial areas of study with emphasis on formulation, integration, and implementation of policies and strategies of the firm. This is a capstone course and must be taken after all core requirements or by consent of the director of the M.B.A. program in the last semester prior to graduation.

Entrepreneurship

ENTR 6150 - Entrepreneurship
3 credit hours Issues related to starting and growing a business. Focuses primarily on the development and management of a new venture, including developing the business plan. Addresses issues faced by entrepreneurs and explores relationships among various elements of the business plan to optimize performance.

ENTR 6250 - Corporate Innovation
3 credit hours Prerequisite: Graduate standing. Theory and practice of corporate innovation and entrepreneurship. Emphasis on how to recognize and foster creative ideas within an existing organization and turn these ideas into actual innovations in the marketplace.

ENTR 6350 - Social Entrepreneurship and Social Innovation
3 credit hours (Same as MGMT 6350.) Explores the elements of social entrepreneurship and social innovation and how these approaches are used to solve the world's social challenges. Uses systems and design thinking along with traditional business approaches to address social challenges and develop measures for organizational performance that include social impact measures in addition to traditional business performance measures. Students challenged to generate a social innovation or social entrepreneurship solution and develop a social venture plan to implement that solution.

Management

MGMT 5840 - Study Abroad
3 credit hours Prerequisites: Permission of department; Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

MGMT 6000 - Management and Operations Concepts
3 credit hours Concepts of the management functions of planning, organizing, leading, and controlling as applied to managing people in organizations. Production and operations management concepts with emphasis on using quantitative models for decision making. Prerequisite for M.B.A. program. May not be used for elective credit in graduate business degree program.

MGMT 6100 - Strategic Decision Making
3 credit hours Prerequisite: MGMT 3610 or MGMT 6000. Managerial theory and practice of solving problems, making decisions, and developing strategies for services and/or products. Emphasis on developing practical responses to decision issues using creativity and innovation in a team environment. (This course is not open to students earning a Master of Business Administration degree.)

MGMT 6200 - Lean Project Management Principles
3 credit hours Prerequisite: MGMT 3620, MGMT 6000, or MGMT 6650.Theory and practice of managing projects for services, products, and/or events in the context of operations management methods. Emphasis on application of lean concepts to project management.

MGMT 6250 - Health Care Resource Management
3 credit hours Addresses the forecasting, planning, utilization, and management of resources in organizations within the health care industry as well as industry peripheral organizations. Examines the management of the full spectrum of resources to meet the highly complex demand model as a health care leader.

MGMT 6300 - Not-for-Profit Management and Governance
3 credit hours Prerequisite: JCOB student or permission of department. Focuses on the management theories and practices that impact effective management and governance of

organizations in the not-for-profit sector. Emphasizes management decision making within the not-for-profit context and will be one of two core courses in the Master's of Science in Management Social Innovation and Not-for-Profit concentration curriculum.

MGMT 6350 - Social Entrepreneurship and Social Innovation
3 credit hours (Same as ENTR 6350.) Explores the elements of social entrepreneurship and social innovation and how these approaches are used to solve the world's social challenges. Uses systems and design thinking along with traditional business approaches to address social challenges and develop measures for organizational performance that include social impact measures in addition to traditional business performance measures. Students challenged to generate a social innovation or social entrepreneurship solution and develop a social venture plan to implement that solution.

MGMT 6400 - Current Issues in Social Innovation and Not-for-Profit Management
3 credit hours Prerequisite: MGMT 3610 or MGMT 6600 or permission of department. Current management issues that impact organizations in the not-for-profit sector. Topics include managing change/crisis management, organization culture, strategic human resource management, diversity, managing quality, resource development, accountability to stakeholders, competition among nonprofits, international issues, management issues of membership organizations and small not-for-profits, leadership challenges, managing volunteers, social entrepreneurship, and marketing.

MGMT 6450 - Health Care Quality and Accountability for Leaders
3 credit hours Prerequisite: Admission to Jones College of Business. Addresses health care quality and required accountability within the health care industry from the perspective of a non-clinical leader. Discusses the critical topics of continuous quality improvement (CQI), CQI models, CQI project planning and implementations, accreditation standards, Lean, and Six Sigma from the perspective of non-clinical leaders in organizations serving in multiple tiers of the health services delivery systems. Examines the nuances of healthcare organizational culture and its impact on healthcare quality and accountability.

MGMT 6510 - Current Problems in Human Resource Management and Industrial Relations
3 credit hours Investigation of current problems. Emphasis on current theory, problems, and practices in the public and private sector. Consideration of legal and political environment stressed as related to management policy formulation.

MGMT 6550 - Distribution Center Management
3 credit hours Prerequisite: MGMT 3620 or MGMT 6000 or MGMT 6650. Focuses on the concepts and techniques required to manage a contemporary distribution center. Emphasizes the role of a distribution center within a supply chain and best practices leading to efficient operational performance.

MGMT 6600 - Organization Behavior
3 credit hours Behavioral science concepts and research in the management of organizations; theories dealing with interpersonal relationships, motivation systems, group dynamics, communications, and authority related to organizational behavior, control, and structure problems.

MGMT 6650 - Operations Management
3 credit hours Strategic and tactical decisions involved with planning, operating, and controlling the operations functions in a firm. Emphasis on problem identification and solution.

MGMT 6660 - Organization Development
3 credit hours Approaches for effecting change in organizations. Emphasis on the individual and personal development of the student to be more effective in managing change and innovation.

MGMT 6670 - Seminar in Negotiation
3 credit hours A structured overview of the process of negotiation in organizations and manager development of improved negotiation skills. Topics include distributive negotiations, integrative negotiations, tactics, strategies, power dynamics, alternative dispute resolution, and negotiation ethics in an organization environment.

MGMT 6680 - Seminar in Human Resources Management
3 credit hours Focus on the responsibility of all managers with respect to the effective development of human resources. The responsibility of all functional areas in the human resource department or impinging forces such as technology, organized labor, and

government legislation examined along with the emerging concepts, problems, and theories supported by research in the field.

MGMT 6690 - Current Issues in Management
3 credit hours Prerequisite: JCOB student or permission of department. Investigates current issues in management, using recent events and emerging theoretical developments to examine relevant complexities facing practitioners.

MGMT 6700 - Supply Chain Key Performance Indicators
3 credit hours Focuses on strategic use of key performance indicators (KPIs, dashboard metrics, and balanced scorecards) as a method to manage business processes. Aspects of performance measurement will be studied including design, data sources, conflicting KPIs, and presentation of results.

MGMT 6730 - International Supply Chain Management
3 credit hours Principles of supply chain management and supply chain management environments. Examines integration with other companies to manage flow of resources, including materials, information, people, etc., in a global supply chain environment.

MGMT 6740 - Leadership and Motivation
3 credit hours Issues in leadership and motivation in business organizations. An examination of the theoretical framework for leadership and motivation processes serves as foundation. Emphasis on practical issues and applications of leadership development and motivation.

MGMT 6750 - Business Ethics
3 credit hours Impact of individual values and ethics on the management of organizations. Topics include legal and ethical aspects of dealing with organization stakeholders: stockholders, consumers, employees, and the general community. Emphasis on using ethical theory to make good business decisions.

MGMT 6760 - Continuous Improvement/Problem Solving
3 credit hours Applies two major Continuous Improvement strategies to business process improvement efforts. Compares the Baldridge Performance Excellence Framework to overall organizational evaluation (gap analysis). Applies Lean Six Sigma techniques to specific problem solving and process improvement situations.

MGMT 6770 - International Management
3 credit hours Major issues associated with the formulation and implementation of corporate strategy for international and global operations. Emphasis on the understanding of global environmental forces surrounding international business operations and the management issues facing global organizations.

MGMT 6780 - Health Care Management
3 credit hours An overview of the U.S. health care system, including managed care, governmental and private sector programs and policies affecting the delivery of health care (e.g., Medicare, Medicaid, and private health insurance), and legal, ethical, and budgeting issues relevant to managing health care organizations. Presents strategic and operational considerations unique to the management of health care organizations.

MGMT 6790 - Independent Research in Management
1 to 3 credit hours Prerequisite: 21 graduate hours and/or approval of department chair. Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of an approved faculty member. May be repeated for up to 4 credits.

MGMT 6800 - Applied Management Project
3 credit hours Prerequisites: Open only to M.S. in Management students who are in their last semester of coursework (must have completed 24 graduate level hours); permission of department required; must be completed with B- or better. Capstone course that provides students with the opportunity to integrate and synthesize knowledge gained throughout the graduate program. Development of a substantial project that demonstrates mastery of competencies, concepts, principles, and practices for success in their field of leadership, supply chain management, or not-for-profit management.

MBA Management

MBAM 6825 - Leading Organizations
2 credit hours Explores current management thought and experience on how to effectively lead/manage the people within an organization in a changing world. Emphasis on self-assessment, skill improvement, and

problem solving of the current challenges organizations face.

MBAM 6875 - Supply Chain Operations
3 credit hours Prerequisite: MBAI 6835. Overview on the integration between supply chain operations strategies/decisions and their impact on other business functions in an organization.

MBAM 6915 - Integrated Marketing and Management Decision Making
3 credit hours Prerequisites: MBAK 6895 and MBAM 6825. Offers an applied approach to the integration of marketing strategy and management fundamentals to address current business challenges. Explores the nexus between external-focused marketing and internal-focused management practices. Working in teams, students will develop solutions to current marketing challenges and internal management challenges and present their solutions for feedback.

MBAM 6925 - Strategic Business Consulting
4 credit hours Prerequisites: MBAB 6805, MBAK 6915/MBAM 6915, MBAM 6875, MBAA 6885/MBAF 6885, and MBAI 6905. Capstone course integrating the entire College of Business curriculum. Specifically focuses on applying analysis tools to real companies and the strategic issues they face.

Marketing

Robert B. Blair, Interim Chair
(615) 898-2902
www.mtsu.edu/marketing
The Department of Marketing offers the Master of Business Education.
NOTE: ***This program is currently being phased out and is no longer admitting new students.***

Business Education, M.B.E.

Stephen D. Lewis, Program Director
(615) 898-2035
Steve.Lewis@mtsu.edu
The Department of Marketing offers the Master of Business Education degree. The M.B.E. offers preparation to teach business subjects at the middle school and secondary school levels, to teach in technology centers and community colleges, or to train individuals in a corporate environment. A flexible curriculum allows students to customize their programs to fit individual objectives. As many as 27 elective hours may be chosen in consultation with an advisor; thus, tailoring a program to fit goals is easy. Advisement for the degree is provided by graduate faculty members in this department.
Please see undergraduate catalog for information regarding undergraduate programs.
NOTE: ***This program is currently being phased out and is no longer admitting new students.***

Admission Requirements - Closed

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores or scores on the Miller Analogies Test (MAT) and undergraduate and graduate grade point average.
All students in the graduate program will be expected to have at least 24 semester hours of undergraduate business subjects.

Application Procedures - Closed

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.B.E. program;
3. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT);
4. submit official transcripts of all previous college work.

Degree Requirements

The Master of Business Education requires completion of 33 semester hours with no more than 30 percent of the total dually listed as undergraduate/graduate hours.
Candidate must

1. successfully complete a written comprehensive examination (may be taken no more than twice);
2. meet licensure requirements to teach business subjects upon completion of the degree or select the non-teaching/nonlicensure option.

Curriculum: Business Education

The following illustrates the coursework requirements.

General Option (33 hours)

- BCED 5710 - History and Foundations of Business Education and Marketing Education **3 credit hours** *
- BCED 6620 - Research in Business and Marketing Education **3 credit hours**
- 27 hours of guided electives
  Students who complete this course at the undergraduate level may substitute another three-hour graduate level course in business or marketing education.

Research Option (33 hours)

- BCED 5710 - History and Foundations of Business Education and Marketing Education **3 credit hours** *
- BCED 6620 - Research in Business and Marketing Education **3 credit hours**
- BCED 6780 - Problems in Business Education, Marketing Education, and Training **3 credit hours**
- 24 hours of guided electives
  Students who complete this course at the undergraduate level may substitute another three-hour graduate level course in business or marketing education.

Notes

All program electives will be chosen in consultation with department advisor.
A nonteaching/nonlicensure training and development specialization includes PRST 6400 and PRST 6450. Electives for this specialization will be chosen in consultation with a department advisor.

Business Communication and Education

BCED 5200 - Problems in Business Education, Marketing Education and Office Management
1 to 3 credit hours Prerequisites: Graduate standing and consent of department chair. Individual research, reading analysis, or projects in contemporary problems and issues in concentrated area of study under direction of a faculty member. May be taken twice.

BCED 5240 - Materials and Methods in Business and Marketing Education
3 credit hours Analysis of learning context, measurable objectives, materials/resources, research, and appropriate instructional strategies for developing teaching strategies and delivery systems in business/marketing education courses such as accounting, legal systems, communication, computer applications, economics, entrepreneurship, introduction to business and marketing management, marketing, personal finance, retail operations, and work-based learning.

BCED 5250 - Innovations and Problems in Information Technology
3 credit hours Methods of teaching business technology skills in middle and secondary schools as well as in corporate settings. Topics include reviewing strategies and current trends; developing unit and lesson plans; teaching learning segments and evaluating learning; determining appropriate equipment, software, and teacher/student resources; and demonstrating proficiency in use of technology.

BCED 5340 - Integrated Administrative Technology
3 credit hours Development of advanced, integrated software applications skills including operating systems, word processing, spreadsheet, database, and other administrative productivity software to solve business problems and provide information for effective decision making in the workplace. Topics include digital citizenship, electronic communication and collaboration, ethical and responsible use of integrated administrative technology, and information management.

BCED 5350 - Records Management
3 credit hours Equipment and systems used for information storage, transmission, and retrieval. Filing, microfilming, tape processing, storage system design, form usage, and other information management functions in the office.

BCED 5410 - Virtual Business Presentations
3 credit hours Prerequisite: BCED 2330 or equivalent knowledge of computers. Skills needed to develop and deliver rich virtual business presentations via the web, video, and teleconference. Emphasis on the hands-on practical techniques for planning, designing, and delivering engaging, interactive, participative, and impactful virtual business presentations.

BCED 5510 - Business Report Writing
3 credit hours Prerequisite: BCED 3510 or equivalent. Nature, general functions, and present need of reports in industry. Recognizing, organizing, and investigating problems preparatory to writing reports and construction and writing of distinctive business and technical reports.

BCED 5640 - Issues and Trends in Office Management
3 credit hours Evaluation of significant research in office management. Observations in local business offices and visits to managers and identifying and solving office problems.

BCED 5645 - Issues and Trends in Corporate Communication
3 credit hours Prerequisite: BCED 5660. Significant research of emerging issues and trends in corporate communication.

BCED 5660 - Corporate Communication
3 credit hours Prerequisite: BCED 3510 or equivalent. Research and analysis of case studies of significant research; case studies in business communication; communication policies, principles, and procedures from the executive's viewpoint.

BCED 5670 - International Business Communication
3 credit hours Provides a theoretical and practical framework for understanding and conducting effective international business communication. Emphasis on the analysis and development of international business communication processes.

BCED 5710 - History and Foundations of Business Education and Marketing Education
3 credit hours Developments, aims, principles, and present status of business education; organization and evaluation of the business education curriculum; administration and supervision of business education.

BCED 5810 - Internship Program
3 credit hours A supervised program of related work experience. Provides experiential opportunities for the application of the theoretical concepts learned.

BCED 5840 - Study Abroad
3 credit hours Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

BCED 5850 - Digital Communication for Business
3 credit hours Prerequisite: BCED 3510 or BCED 6820. Skills needed to create digital communication for business with emphasis on the writing process, digital tools, planning, design, collaborating, copyright and fair use, and technical aspects of digital writing.

BCED 6310 - History and Philosophy of Business Education and Marketing Education
3 credit hours Historical development, philosophy, and objectives of business and marketing education. Contributions to general education, vocational education, and adult education. Curriculum in relation to future needs, objectives, and social change.

BCED 6460 - Issues and Trends in Business Education and Marketing Education
3 credit hours Exploration and analysis of research-based studies on current issues and trends in vocational-technical education and business education, marketing education, and office management.

BCED 6600 - Organization and Coordination of Marketing Education Curriculum
3 credit hours Offers preparation for developing, implementing, and coordinating the marketing education curriculum. Emphasis on organizing and administering marketing education programs at the secondary level, on coordinating the work-based learning activities of vocational students, and on integrating and managing youth organizations.

BCED 6620 - Research in Business and Marketing Education
3 credit hours Introduction to research methods, tools, and interpretation of research data.

BCED 6650 - Workshop in Business Education and or Marketing Education
3 credit hours Innovations in marketing education and/or business education. Special programs and organizations featured.

BCED 6680 - Women and Minorities in Business
3 credit hours Advancement of women and minorities as entrepreneurs and their roles on local, regional, and national boards of directors. Students interview local entrepreneurs to gain knowledge of being an entrepreneur in the twenty-first century.

BCED 6720 - Measurement and Evaluation in Business and Marketing Education
3 credit hours Teacher-made, standardized, and industry-developed tests and other standards used in teaching, used to evaluate student achievement, and used by industry for employment and promotion.

BCED 6780 - Problems in Business Education, Marketing Education, and Training
3 credit hours Individualized research projects in special areas of concern to teachers of business education, marketing education, and vocational education and to trainers in business and industry.

BCED 6810 - Recent Developments in Business and Marketing Education
3 credit hours Effective strategies for teaching business and marketing concepts and skills in middle and secondary schools as well as in corporate settings. Topics include analyzing current research, planning and delivering lessons, and facilitating and assessing learning in areas such as accounting, legal systems, communication, computer applications, economics, finance, entrepreneurship, marketing, management, and work-based learning.

BCED 6820 - Managerial Communication
3 credit hours Analysis of communication theory and communication processes with emphasis on development of executive communication skills essential for understanding organizational processes from a holistic perspective. Covers organizational

theory, behavior, and interpersonal communication from both a domestic and global perspective.

BCED 6830 - Recent Developments in Integrated Information Technology
3 credit hours Effective strategies for teaching business information technology concepts and skills in middle and secondary schools as well as in corporate settings. Topics include demonstrating proficiency in use of current software, planning and teaching lessons, facilitating and assessing learning, and equipping and managing a classroom.

BCED 6910 - Internship Program
3 credit hours A supervised program of related work experience. Provides experiential opportunities for the application of the theoretical concepts learned.

BCED 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Marketing

MKT 5840 - Study Abroad
3 credit hours Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

MKT 6000 - Marketing Concepts
3 credit hours A survey of the functions, processes, and institutions involved in the creation, promotion, pricing, and distribution of consumer and industrial goods and services with an emphasis on the decision-making process. May not be used for elective credit in graduate business degree program.

MKT 6800 - Marketing Management
3 credit hours An analytical managerial approach to the marketing activities of a business enterprise. Emphasis on problem solving and marketing simulation.

MKT 6810 - Promotional Strategy
3 credit hours Promotional goals, plans, and concepts in marketing; the role of marketing communication in society; the organization, budgeting, and scheduling of promotion; innovation and the adoption process; managerial decision making in the promotional mix.

MKT 6820 - Market Behavior
3 credit hours Behavioral science concepts and applied research relating to the process of buyer behavior. Topics include cognition, motivation, personality, group influence, social class, culture, and behavior models.

MKT 6830 - Marketing Systems
3 credit hours An analytic, decision-oriented study of marketing channels. Problems of integrating relevant variables within the marketing system to achieve optimum returns for all members.

MKT 6840 - Marketing Seminar: Current Topics in Marketing
3 credit hours Theoretical bases of marketing concepts, principles, and strategies; the development, acceptance, and possible future direction of emerging concepts and practices.

MKT 6850 - International Marketing Seminar
3 credit hours Difference in market arrangements and in legal, cultural, and economic factors in different countries. Planning and organizing for international marketing operations, forecasting, and analyses; interrelationships with other functions; strategy of product pricing, promotion, and channels.

MKT 6860 - Marketing Research and Decision Making
3 credit hours Investigates research methods for providing marketing information to assist managers in making better decisions, particularly in identifying marketing opportunities and problems. Specifically focuses on understanding both primary and secondary research processes and developing an ability to evaluate primary and secondary sources of information.

MKT 6870 - Techniques in Social Media, Search Engine and Internet Marketing
3 credit hours Channels used in direct marketing with an emphasis on electronic commerce; strategic differences among the channels of direct marketing and the managerial implications of each. The impact of changing technology, regulations, and privacy issues.

MKT 6880 - Sport and Entertainment Marketing
3 credit hours Prerequisite: MKT 6000 or MKT 6800. Issues pertaining to marketing in the sport and entertainment industries. Focuses on role of sponsorship in a firm's marketing strategy.

MKT 6890 - Problems in Marketing
3 credit hours Prerequisite: Approval of department chair. Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of an approved graduate faculty member. Not approved or substituted for core requirements. Approval of supervisory faculty member and department chair must be obtained in writing before student will be allowed to register for independent study.

MKT 6900 - Health Care Marketing
3 credit hours The role of marketing in the delivery of health care services. Topics include the history of health care in the United States, the evolution of marketing in health care, marketing strategy and implementation in health care, and the future of health care marketing. Students will apply marketing concepts and theory to practical situations.

MBA Marketing

MBAK 5640 - Entertainment Branding
3 credit hours Prerequisites: MKT 3820 or MBAK 6895 or permission of instructor. Role and importance of branding in the entertainment industry including the development of branding objectives consistent with both product and overall marketing objectives. Demonstrates how to align a brand with consumers and partners through the development of a marketing plan relating to an approved entertainment product of student's choosing.

MBAK 6895 - Marketing Strategy
2 credit hours An analytical, managerial approach to the marketing activities of a business enterprise. Emphasis on problem solving and decision making in marketing environments.

MBAK 6915 - Integrated Marketing and Management Decision Making
3 credit hours Prerequisites: MBAK 6895 and MBAM 6825. Offers an applied approach to the integration of marketing strategy and management fundamentals to address current business challenges. Explores the nexus between external-focused marketing and internal-focused management practices. Working in teams, students will develop solutions to current marketing challenges and internal management challenges and present their solutions for feedback.

College of Education

Assessment, Learning, and Student Success: Assessment, Learning, and School Improvement Concentration, Ed.D.

Kevin Krahenbuhl, Program Director
(615) 898-2995
Jennifer Hyde, Program Secretary
EdD@mtsu.edu

The Ed.D. in Assessment, Learning, and Student Success is a doctoral program capitalizing on faculty expertise in the College of Education and across the University. The program provides a structured curriculum with early development and ongoing support for students as they work to complete their doctoral dissertation. The Ed.D. in Assessment, Learning, and Student Success has two concentrations: Assessment, Learning, and School Improvement and Higher Education.

The concentration in Assessment, Learning, and School Improvement is designed to

- meet a specific need to develop the capacity of PreK-12 school leaders (including teacher-leaders and education leaders across the range of policy and non-profit agencies),
- significantly improve student academic achievement, and
- meet increased accountability mandates.

This degree will provide educational leaders with the knowledge and analytical skills to analyze all forms of student-learning data (formative and summative, quantitative and qualitative) in order to accurately identify initiatives that will improve their students' success.

Please see the undergraduate catalog for undergraduate program information.

Admission Requirements

Admission is limited and will be based on a holistic review of test scores, past academic success, and potential for success in a rigorous doctoral program. The following are guidelines for admission to the Ed.D. in Assessment, Learning, and Student Success (although meeting these criteria does not guarantee admission to this selective program of study):

- Applicants are expected to have a minimum grade point average (GPA) of 3.00 in undergraduate coursework.
- Students who have taken graduate courses are expected to have a minimum grade point average (GPA) of 3.50 in graduate coursework.
- Applicants are expected to submit three letters of recommendation from former professors or other individuals who know the student's ability.

Application Procedures

Al***l application materials must be submitted to the College of Graduate Studies***. ***NOTE: The program is partnering with local school districts for off-campus cohorts. Please contact program office for current procedures pertaining to location and deadlines.***
Applicant must

1. have earned a Master's degree from an accredited institution;
2. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
3. submit official transcripts from all colleges and universities previously attended showing a grade point average (GPA) in previous academic work that indicates potential for success in advanced study (successful applicants will typically have a GPA in prior graduate work that exceeds 3.50);
4. submit three letters of recommendation which must meet the following specific criteria. The first letter must be from an educational leader (principal, assistant principal, central office administrator, school board member) of your school or school district and should specifically address: (a) your abilities, and (b) their support for you to lead an effort to significantly improve student learning and achievement in your current position. The second letter must be from a tenure-track professor, and it should address your potential to successfully complete an academically rigorous doctoral program. The third letter may be from any educational professional (i.e.: LKPreK-12 education leader, university faculty, policy maker, governmental agency representative, non-profit or philanthropic organization leader, etc.) and should address your specific skills, attitudes, and experience(s) related to the goals of this program.
5. submit a statement of purpose (750-1000 words) communicating your professional goals and suitability for the doctoral program in Assessment, Learning, and Student Success. In your statement you should address how your participating in this program will result in increased student learning and achievement as measured on standardized test scores for students under your educational care and authority. You may include a brief discussion of any literature (e.g. research articles, texts-please use appropriate APA citations) that has informed your professional practice or influenced you in some way;
6. submit a current vitae including education and employment history, experience with school improvement, professional presentations and publications, awards, recognitions, etc.;
7. participate in an interview with the Assessment, Learning, and Student Success doctoral program admission committee as part of the admissions process.

NOTE: Accepted students will be required to attest to their commitment to the cohort and to contribute the necessary quality and quantity of time and energy to ensure the success of this community of learners as each student prepares to lead an effort to significantly improve her/his school or school district.
NOTE: International students will be required to meet MTSU's English language proficiency requirements in addition to the program admission requirements.

Degree Requirements

The Doctor of Education (Ed.D.) in Assessment, Learning and Student Success Doctoral Program requires

1. completion of 60-72 semester hours;
2. completion of a minimum of one research-based article submitted for publication in a peer-reviewed professional journal; (The research-based article and presentation must receive approval from the program director (or designee) to meet degree requirements.)
3. completion of one research-based presentation at a regional/national educational conference; (The research-based article and presentation must receive approval from the program director (or designee) to meet degree requirements.)
4. mastery of academic coursework (measured by course grades and successful completion of a comprehensive examination); and
5. successful defense of a dissertation that demonstrates mastery of applied research methods in the field of education.

Curriculum: Assessment, Learning, and School Improvement Concentration

The following illustrates the coursework requirements. In addition, a maximum of 24 hours of dissertation research may be required to fulfill degree requirements.

Student Learning Core (13 hours)

- ALSI 7010 - Cognitive Learning Theory and Student Achievement **3 credit hours**
- ALSI 7020 - Implementing a Guaranteed and Viable Curriculum **3 credit hours**
- ALSI 7030 - The Effective Teaching Knowledge Base **3 credit hours**
- ALSI 7040 - Teacher Observation, Evaluation, and Improvement **3 credit hours**
- ALSI 7050 - Application and Research Seminar: Student Learning **1 credit hours**

Research Methods (9 hours)

- ALSI 7600 - Educational Statistics **3 credit hours**
- ALSI 7610 - Qualitative Research Methodologies **3 credit hours**

- ALSI 7620 - Advanced Quantitative Research Methodologies **3 credit hours** OR
- ALSI 7630 - Advanced Qualitative Research Methods **3 credit hours**

Assessment Core (13 hours)

- ALSI 7210 - Assessment Literacy **3 credit hours**
- ALSI 7220 - Advanced Applications in Assessment **3 credit hours**
- ALSI 7230 - Formative Assessments and Improved Student Learning **3 credit hours**
- ALSI 7240 - Data Analysis, Learning, and School Improvement **3 credit hours**
- ALSI 7250 - Application and Research Seminar: Assessing Student Learning **1 credit hours**

Research-Based School Improvement Core (13 hours)

- ALSI 7410 - Highly Effective Schools and School Districts **3 credit hours**
- ALSI 7420 - Schools as Professional Learning Communities **3 credit hours**
- ALSI 7430 - Collaborative Teaming and Effective Schools **3 credit hours**
- ALSI 7440 - Improving Student Achievement in Core Academic Areas and Sub-Groups: Best Practices **3 credit hours**
- ALSI 7450 - Application and Research Seminar: Student Success **1 credit hours**

Dissertation (12-24 hours)

- ALSI 7640 - Dissertation Research **1 to 6 credit hours** (Students will enroll in dissertation research in multiple semesters for a total of 12-24 credits.)

Program Notes

Currently, the program admits students in successive cohorts. All students in the graduate program are expected to complete all coursework with their cohort as scheduled.

Assessment, Learning, and Student Success: Higher Education Concentration, Ed.D.

Kevin Krahenbuhl, Program Director
(615) 898-2995

Jim Rost, Coordinator
(615) 898-5481
Jim.Rost@mtsu.edu

The Ed.D. in Assessment Learning, and Student Success is a doctoral program capitalizing on faculty expertise in the College of Education and across the University. This program provides a structured curriculum with early development and ongoing support for students as they work to complete their doctoral dissertation. The Ed.D. in Assessment, Learning, and Student Success has two concentrations: Assessment, Learning, and School Improvement and Higher Education.

The concentration in Higher Education is designed to

- prepare individuals at community colleges, universities, and state coordinating boards to be successful leaders in curriculum and policy development, and accountability initiatives;
- prepare individuals to become more effective faculty members;
- prepare individuals to lead student success, academic affairs, and other divisions within academic institutions.

This degree will provide educational leaders with the knowledge and analytical skills to analyze all forms of student-learning data (formative and summative, quantitative and qualitative) in order to accurately identify initiatives that will improve their students' success.

Please see the undergraduate catalog for undergraduate information.

Admission Requirements

Admission is limited and will be based on a holistic review of test scores, past academic success, and potential for success in a rigorous doctoral program. The following are guidelines for admission to the Ed.D in Assessment, Learning, and Student Success (although meeting these criteria does not guarantee admission to this selective program of study).

- Applicants are expected to have a minimum grade point average (GPA) of 3.00 in undergraduate coursework.
- Students who have taken graduate courses are expected to have a minimum grade point average (GPA) of 3.50 in their graduate coursework.
- Submission of three letters of recommendation from former professors or other individuals who know the student's ability.

Use of Prior Earned Credits

A master's degree is not required for entry to this program. Students with a master's degree in a related field may have up to 15 hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the curriculum. Students entering with an Ed.S. degree in a related field may have up to 30 hours of previous coursework applied after determination that the content of the courses is directly equivalent to existing courses in the curriculum. No more than 15 hours at the 6000 (master's) level may be applied to degree requirements. All previous course work and requests for substitutions must meet MTSU College of Graduate Studies guidelines and be approved by the Program Admissions Committee.

Application Procedures

All applications materials must be submitted to the College of Graduate Studies. **NOTE**: The program is partnering with local school districts for off-campus cohorts. Please contact program office for current procedures pertaining to location and deadlines.
Applicant must

1. submit application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all colleges and universities previously attended showing a grade point average (GPA) in previous academic work that indicates potential for success in advanced study (successful applicants will typically have a GPA in prior graduate work that exceeds 3.50);
3. submit three letters of recommendation from former professors or other individuals who know the student's ability.
4. submit a statement of purpose (750-1000 words) communicating professional goals and suitability for the doctoral program in Assessment, Learning, and Student Success. In the statement student should address how participating in this program will result in increased student success. A brief discussion of any literature (e.g. research articles, texts-please use appropriate APA citations) that has informed your professional practice or influenced you in some way may be included.
5. submit a current vitae including education and employment history, experience with student success, professional presentations and publications, awards, recognitions, etc.

NOTE: ***International students will be required to meet MTSU's English language proficiency requirements in addition to the program admission requirements.***

Degree Requirements

The Doctor of Education (Ed.D.) in Assessment, Learning and Student Success Doctoral Program requires

1. completion of 60-72 semester hours;
2. completion of a minimum of one research-based article submitted for publication in a peer-reviewed professional journal; (The research-based article and presentation must receive approval from the program director [or designee] to meet degree requirements.)
3. completion of one research-based presentation at a regional/national educational conference. (The research-based article and presentation must receive approval from the program director [or designee] to meet degree requirements.)
4. mastery of academic coursework (measured by course grades and successful completion of a comprehensive examination); and
5. successful defense of a dissertation that demonstrates mastery of applied research methods in a field related to student success.

Curriculum: Assessment, Learning and Student Success, Higher Education Concentration

The following illustrates the minimum coursework requirements. In addition, a maximum of 24 hours of dissertation research may be required to fulfill degree requirements.

Core (12 hours)

- ALSI 7600 - Educational Statistics **3 credit hours**
- ALSI 7610 - Qualitative Research Methodologies **3 credit hours**
- ALSI 7050 - Application and Research Seminar: Student Learning **1 credit hours**
- ALSI 7250 - Application and Research Seminar: Assessing Student Learning **1 credit hours**
- ALSI 7450 - Application and Research Seminar: Student Success **1 credit hours**

- ALSI 7620 - Advanced Quantitative Research Methodologies **3 credit hours** OR
- ALSI 7630 - Advanced Qualitative Research Methods **3 credit hours**

Dissertation (12-24 hours)

- ALSI 7640 - Dissertation Research **1 to 6 credit hours (12 credit hours required)**

Required Courses (30 hours)

- FOED 7520 - Evaluation in Higher Education **3 credit hours**
- FOED 7571 - The Ethics of Higher Education **3 credit hours**
- FOED 7580 - The College Student **3 credit hours**
- SPSE 7005 - Student Affairs in Higher Education **3 credit hours**
- SPSE 7007 - Student Success in Higher Education **3 credit hours**
- SPSE 7080 - Studies in Leadership **3 credit hours**
- SPSE 7210 - Legal Issues in Higher Education **3 credit hours**
- SPSE 7530 - Administration of Higher Education **3 credit hours**
- SPSE 7540 - Overview of Higher Education **3 credit hours**
- SPSE 7551 - Instructional Development in Higher Education **3 credit hours**

Electives (6 hours)

Choose two courses from the following:

- SPSE 7001 - College Teaching Practicum **3 credit hours**
- SPSE 7905 - Online Course Development for Higher Education **3 credit hours**
- FOED 7060 - Seminar in Educational Foundations **3 credit hours**
- FOED 7519 - Measurement and Assessment in Higher Education **3 credit hours**
- FOED 7570 - Issues in Higher Education **3 credit hours**

Assessment, Learning, and School Improvement

ALSI 7010 - Cognitive Learning Theory and Student Achievement
3 credit hours Provides thorough knowledge base in research on ties between instructional practices and students' learning and achievement.
Examines cognitive learning theory from learner perspective and draws on newest research on the best classroom and school cultures to support student learning and achievement.

ALSI 7020 - Implementing a Guaranteed and Viable Curriculum
3 credit hours Examines research on importance of a guaranteed and viable curriculum tied to state and national standards as well as the skills needed by school leaders to develop, implement, monitor, and evaluate this type of curriculum.

ALSI 7030 - The Effective Teaching Knowledge Base
3 credit hours Examines research base of instructional practices proven to have direct, positive correlation with improved student achievement. Links this research base to national initiatives and teacher evaluation models aimed at improving teaching experience. Equips students with skills to promote adult learning.

ALSI 7040 - Teacher Observation, Evaluation, and Improvement
3 credit hours Focuses on providing students with in-depth knowledge about research behind the concepts of teacher observation, evaluation, and improvement methods as well as applied skills in implementing these evaluative methods, with an emphasis on using these methods to improve instructional practice and ultimately student achievement.

ALSI 7050 - Application and Research Seminar: Student Learning
1 credit hours Provides students with structure and format for reflective practice regarding student learning, including application of research knowledge base to challenges faced in educational settings.

ALSI 7210 - Assessment Literacy
3 credit hours Focuses on assessment vocabulary and practices prevalent in North America and Tennessee. Appropriate use and interpretation of various types of formative and summative assessments, both norm-based and criterion-referenced.

ALSI 7220 - Advanced Applications in Assessment
3 credit hours Engages students in comprehensive study of conceptual and applied aspects of assessment with a focus on the role of assessment in improving student learning. Students will focus on specific skills in developing and using assessment to influence student achievement and school improvement.

ALSI 7230 - Formative Assessments and Improved Student Learning
3 credit hours Emphasizes the development and use of collaboratively developed, common, formative assessments for improving student achievement. Examines both the research basis behind and applications for developing multiple kinds of formative assessments and for collaboratively analyzing their results.

ALSI 7240 - Data Analysis, Learning, and School Improvement
3 credit hours Provides students with a deep understanding of the interplay between and the connection of multiple assessment tools, data analysis, improved student learning, and school and district improvement with an emphasis on linking student achievement data to decision-making for improving student learning at every level.

ALSI 7250 - Application and Research Seminar: Assessing Student Learning
1 credit hours Provides students with structure and format for reflective practice regarding assessment of student learning, including application of research knowledge base to challenges faced in educational settings.

ALSI 7410 - Highly Effective Schools and School Districts
3 credit hours Examines the research base related to the cultures and practices that characterize highly effective schools and school districts. Stresses the process skills educational leaders need to be change agents and to apply research findings to specific educational settings with an emphasis on developing consensus for substantive change.

ALSI 7420 - Schools as Professional Learning Communities
3 credit hours Examines the research base related to professional learning communities and their link to greater student learning and school improvement. Focuses on skills required for successful implementation of professional learning community concepts and practices at all levels to create a culture of continuous improvement.

ALSI 7430 - Collaborative Teaming and Effective Schools
3 credit hours Provides students with the importance of collaborative teaming in order to impact student learning and implementing the best instructional practices.

ALSI 7440 - Improving Student Achievement in Core Academic Areas and Sub-Groups: Best Practices
3 credit hours Examines the research base on best practices as well as applications for improving student achievement in specific core curricular areas (emphasis on math and literacy) and among specific subgroups (emphasis on children with disabilities, children of poverty, and children whose primary language is not English). Applies this knowledge base to designing timely, directive, and specific systems of intervention.

ALSI 7450 - Application and Research Seminar: Student Success
1 credit hours Provides students with structure and format for reflective practice regarding student success, including application of research knowledge base to challenges faced in educational settings.

ALSI 7600 - Educational Statistics
3 credit hours Prerequisite: One undergraduate statistics course or permission of instructor. Provides students with knowledge and skills needed to understand, interpret, and apply appropriate statistical methodologies and concepts to the educational settings. A survey course for basic statistical methods, including descriptive statistics, confidence intervals, sampling, distribution, Central Limit Theorem, logic and procedure of hypothesis testing, z-tests and t-tests of means and proportions, chi-square tests, correlation and simple regression, and one-way ANOVA. Statistical software packages such as SPSS and SAS will be utilized for data analysis. Prerequisite for ALSI 7620 and ALSI 7630.

ALSI 7610 - Qualitative Research Methodologies
3 credit hours Provides candidates with a thorough understanding of cognitive learning theory in order to inform best instructional practices on behalf of diverse learners. Framed by a collaborative team approach within a school community.

ALSI 7620 - Advanced Quantitative Research Methodologies
3 credit hours Prerequisites: ALSI 7600 and ALSI 7610. Provides students with advanced quantitative research methodologies that can be applied in an educational setting. Topics include power and effect size, ANOVA (One-Way Analysis of variance, Two-Way Analysis of Variance), MANOVA (Multivariate Analysis of Variance), ANCOVA (Analysis of Covariance), Factor Analysis, Multiple Regression, Logistic Regression, and ranking or Non-Parametric tests. The Statistical Package for the Social Sciences (SPSS) will be used. The course will include the study of the methodologies used in growth models.

ALSI 7630 - Advanced Qualitative Research Methods
3 credit hours Prerequisites: ALSI 7600 and ALSI 7610. Provides students with advanced qualitative research methodologies that can be applied in an educational setting. Course content focuses on conceptual issues, ordering, framing inquiry, applying appropriate approach and design, selecting and collecting data, approach-specific analysis, interpretation of data, and reporting procedures. Course tasks provide opportunities to develop skills in qualitative coding, bracketing, restorying, descriptive culture sharing, and cross-case theming.

ALSI 7640 - Dissertation Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of the dissertation. Once enrolled, students must register in at least one credit hour of dissertation research each semester until complete. Open only to students who are in the Assessment, Learning, and school Improvement Doctor of Education degree program. S/U grading.

Digital Teaching and Learning Certificate

College of Education
The Digital Teaching and Learning Certificate is designed for practicing teachers at varying levels of their careers. Potential participants include professional educators representing grades PreK-12, instructional coaches, curriculum designers, technology coaches, school leaders and central office personnel who work within the many facets of school curriculum and instruction.

Required Courses (12 hours)

- DTL 5000 - Digital Teaching and Learning Environments **3 credit hours**
- DTL 5010 - Curriculum Design for Digital Teaching, Learning, and Diversity **3 credit hours**
- DTL 5020 - Digital Citizenship: Literacy and Content Instruction **3 credit hours**
- DTL 5030 - Assessment and Evaluation in Digital Teaching and Learning Environments **3 credit hours**

Digital Teaching and Learning

DTL 5000 - Digital Teaching and Learning Environments
3 credit hours Introduces digital learning, course management systems, digital tools, models and strategies for digital learning, deep thinking in the online environment, developing creativity, and risk taking in the digital classroom. Focuses on creating and establishing home-school-student partnerships to ensure success in the digital classroom.

DTL 5010 - Curriculum Design for Digital Teaching, Learning, and Diversity
3 credit hours Examines new media tools and literacies, content creation and development across curriculum areas, standards-based digital instruction, and research-based practices to address the challenges of diversity, equity, and access for all PreK-12 learners.

DTL 5020 - Digital Citizenship: Literacy and Content Instruction
3 credit hours
Emphasis placed on developing personalized, standards-based, content and literacy instruction. Focuses on developing digital citizenship through appropriate instruction based on diverse student needs and options for content and resources.

DTL 5030 - Assessment and Evaluation in Digital Teaching and Learning Environments
3 credit hours
Examines technology as a means for effectively completing the instructional cycle. Explores technology tools in order to evaluate, analyze, and transform ways to engage in appropriate assessment to improve practice and ensure student learning in digital environments. Focuses on data-driven decision making.

Literacy Studies, Literacy Instruction and Staff Development Concentration, Ph.D.

Amy Elleman, Program Director
(615) 904-8434
literacy@mtsu.edu

The Ph.D. in Literacy Studies with a concentration in Literacy Instruction and Staff Development is an interdisciplinary program drawing on faculty from the colleges of Education, Behavioral and Health Sciences, and Liberal Arts. The program offers a flexible framework of courses, field experiences, and research opportunities designed to provide professionals in various spheres of influence with the knowledge, skills, and abilities to effectively address the literacy and learning crisis in the United States.

Applicants with bachelor's or master's degrees in a variety of disciplines are eligible for admission. Typically, a successful student will hold formal qualifications related to some area of PK-12 educational practice. Applicants holding a master's degree may transfer up to 15 credit hours with approval.

A student with a bachelor's degree interested in obtaining a master's degree in Psychology (M.A.) or Literacy (M. Ed.) while pursuing the Ph.D. will need to consult with the program director and the respective departments to understand the additional requirements. Applicants lacking necessary foundational coursework in previous degrees will be required to complete some remedial courses as part of their program of study in addition to the degree requirements.

Admission Requirements

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, letters of recommendation, prior professional experiences, and application essay.

Applicants are expected to have a minimum grade point average (GPA) of 3.50 in master's coursework or 2.75 for a post-bachelor's applicant.

Currently, the program admits students in Fall semester only. All students in the graduate program will be expected to satisfy a residency requirement.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

Applicant must submit

1. application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. official transcripts certifying coursework from each college or university attended (a minimum GPA of 3.5 in master's coursework or 2.75 for a post-bachelor's applicant is required for admission to program);
3. a current curriculum vitae showing at least three (3) years of documented professional experience;
4. a 700 - 1000 word essay explaining how background and objectives relate to the program's purpose;
5. three (3) letters of recommendation from professionals who can address the applicant's interest in literacy and potential for successfully completing a doctoral program;
6. recent GRE scores (within the last five years); preferred minimum scores are Verbal 156, Quantitative 144, and a 4.5 on Analytical Writing.

Degree Requirements

The Doctor of Philosophy (Ph.D.) in Literacy Studies with a concentration in Literacy Instruction and Staff Development requires completion of a minimum of 75 semester hours with at least 70 percent at the 7000 level. Candidates are required to complete and successfully defend a research-based dissertation.

Curriculum: Literacy Studies, Literacy Instruction and Staff Development

The following illustrates the minimum coursework requirements.

Major Core (36 hours)

- LITS 7010 - Literacy Development and Language Learning **3 credit hours**
- LITS 7011 - Neurobiology of Language and Literacy **3 credit hours**
- LITS 7100 - Historical Issues, Trends, and Methodologies in Literacy **3 credit hours**
- LITS 7110 - Models of Literacy Assessment **3 credit hours**
- LITS 7120 - Professional Seminar in Graduate Studies **3 credit hours**
- LITS 7130 - Literacy in the Socio-Cultural Context **3 credit hours**
- LITS 7140 - Research, Design and Methodology in Literacy **3 credit hours**
- LITS 7200 - Practicum in Literacy Studies **1 to 3 credit hours (3 credit hours required)**
- LITS 7210 - Evidence-Based Methods of Literacy Development **3 credit hours**
- LITS 7400 - Reading Comprehension: Theoretical Models and Research Methodologies **3 credit hours**

- PSY 7280 - Psychological Statistics: Regression **3 credit hours** AND
- PSY 7281 - Psychological Statistics: Regression Lab **0 credit hours**

- PSY 7290 - Psychological Statistics: ANOVA **3 credit hours** AND
- PSY 7291 - Psychological Statistics: ANOVA Lab **0 credit hours**

Literacy Instruction and Staff Development Concentration (12 hours)

NOTE: Courses listed here are examples of those deemed appropriate. This list is not exhaustive. Substitutions may be arranged with the permission of a student's program advisor.

- CDIS 6000 - Speech, Language, and Literacy Development **3 credit hours**
- ELED 7220 - Seminar in Elementary Education **1 to 3 credit hours**
- ELED 7250 - From Policy to Practice in American Public Schools **3 credit hours**
- ELED 7350 - Introduction to Qualitative Methods **3 credit hours**
- LITS 7021 - Cognitive Neuropsychology of Literacy **3 credit hours**
- READ 6000 - Foundations of Literacy **3 credit hours**
- READ 6710 - Adolescent Literacy **3 credit hours**
- READ 6730 - Curriculum and Supervision of Literacy Instruction **3 credit hours**
- READ 6750 - Research in Literacy **3 credit hours**
- READ 6760 - Early Literacy **3 credit hours**
- SPSE 6140 - Teacher Leadership for School Improvement **3 credit hours**
- SPSE 6800 - Curriculum Design and Instruction for ELs **3 credit hours**
- SPSE 6900 - Online Learning and Instructional Design **3 credit hours**
- LITS 7150 - Multilingualism and Literacy **3 credit hours**

- PSY 6530 - The Psychology of Reading and Reading Development **3 credit hours** OR
- PSY 7530 - The Psychology of Reading and Reading Development **3 credit hours**

Electives (15 hours)

Choose 15 hours in consultation with the academic advisor.

Dissertation (12 hours)

- LITS 7640 - Dissertation Research **1 to 12 credit hours** (minimum 12 hours)

Literacy Studies, Literacy Measurement and Analysis Concentration, Ph.D.

Amy Elleman, Program Director
(615) 904-8434
literacy@mtsu.edu
The Ph.D. in Literacy Studies with a concentration in Literacy Measurement and Analysis is an interdisciplinary program drawing on faculty from the colleges of Education, Behavioral and Health Sciences, and Liberal Arts. The program offers a flexible framework of courses, field experiences, and research opportunities designed to provide professionals in various spheres of influence with the knowledge, skills, and abilities to effectively address the literacy and learning crisis in the United States.
Applicants with bachelor's or master's degrees in a variety of disciplines are eligible for admission. Typically, a successful student will hold formal qualifications related to some area of PK-12 educational practice. Applicants holding a master's degree may transfer up to 15 credit hours with approval.
A student with a bachelor's degree interested in obtaining a master's degree in Psychology (M.A.) or Literacy (M. Ed.) while pursuing the Ph.D. will need to consult with the program director and the respective departments to understand the additional requirements. Applicants lacking necessary foundational coursework in previous degrees will be required to complete some remedial courses as part of their program of study in addition to the degree requirements.

Admission Requirements

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, letters of recommendation, prior professional experiences, and application essay.
Applicants are expected to have a minimum grade point average (GPA) of 3.50 in master's coursework or 2.75 for a post-bachelor's applicant.
Currently, the program admits students in Fall semester only. All students in the graduate program will be expected to satisfy a residency requirement.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must submit

1. application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. official transcripts certifying coursework from each college or university attended (a minimum GPA of 3.5 in master's coursework or 2.75 for a post-bachelor's applicant is required for admission to program);
3. a current curriculum vitae showing at least three (3) years of documented professional experience;
4. a 700 - 1000 word essay explaining how background and objectives relate to the program's purpose;
5. three (3) letters of recommendation from professionals who can address the applicant's interest in literacy and potential for successfully completing a doctoral program;
6. recent GRE scores (within the last five years); preferred minimum scores are Verbal 156, Quantitative 144, and a 4.5 on Analytical Writing.

Degree Requirements

The Doctor of Philosophy (Ph.D.) in Literacy Studies with a concentration in Literacy Measurement and Analysis requires completion of a minimum of 75 semester hours with at least 70 percent at the 7000 level. Candidates are required to complete and successfully defend a research-based dissertation.

Curriculum: Literacy Studies, Literacy Measurement and Analysis

The following illustrates the minimum coursework requirements.

Major Core (36 hours)

- LITS 7010 - Literacy Development and Language Learning **3 credit hours**
- LITS 7011 - Neurobiology of Language and Literacy **3 credit hours**
- LITS 7100 - Historical Issues, Trends, and Methodologies in Literacy **3 credit hours**
- LITS 7110 - Models of Literacy Assessment **3 credit hours**
- LITS 7120 - Professional Seminar in Graduate Studies **3 credit hours**
- LITS 7130 - Literacy in the Socio-Cultural Context **3 credit hours**
- LITS 7140 - Research, Design and Methodology in Literacy **3 credit hours**
- LITS 7200 - Practicum in Literacy Studies **1 to 3 credit hours (3 credit hours required)**
- LITS 7210 - Evidence-Based Methods of Literacy Development **3 credit hours**
- LITS 7400 - Reading Comprehension: Theoretical Models and Research Methodologies **3 credit hours**

- PSY 7280 - Psychological Statistics: Regression **3 credit hours** AND
- PSY 7281 - Psychological Statistics: Regression Lab **0 credit hours**

- PSY 7290 - Psychological Statistics: ANOVA **3 credit hours** AND
- PSY 7291 - Psychological Statistics: ANOVA Lab **0 credit hours**

Literacy Measurement and Analysis Concentration (12 hours)

NOTE: Courses listed here are examples of those deemed appropriate. This list is not exhaustive. Substitutions may be arranged with the permission of a student's program advisor.

- HHP 7030 - Research Seminar in Human Performance **3 credit hours**
- INFS 5790 - Database Design and Development **3 credit hours**
- LITS 7150 - Multilingualism and Literacy **3 credit hours**
- PSY 6560 - Computer-Based Statistical Packages **3 credit hours**
- PSY 7210 - Advanced Psychometrics **3 credit hours**
- PSY 7550 - Structural Equation Modeling **3 credit hours**
- PSY 7580 - Multivariate Data Analysis **3 credit hours**
- PSY 7585 - Test Construction and Validation **3 credit hours**

Electives (15 hours)

Choose 15 hours in consultation with the academic advisor.

Dissertation (12 hours)

- LITS 7640 - Dissertation Research **1 to 12 credit hours (minimum 12 hours)**

Literacy Studies, Reading Disabilities and Dyslexia Concentration, Ph.D.

Amy Elleman, Program Director
(615) 904-8434
literacy@mtsu.edu
The Ph.D. in Literacy Studies with a concentration in Reading Disabilities and Dyslexia is an interdisciplinary program drawing on faculty from the colleges of Education, Behavioral and Health Sciences, and Liberal Arts. The program offers a flexible framework of courses, field experiences, and research opportunities designed to provide professionals in various spheres of influence with the knowledge, skills, and abilities to effectively address the literacy and learning crisis in the United States.
Applicants with bachelor's or master's degrees in a variety of disciplines are eligible for admission. Typically, a successful student will hold formal qualifications related to some area of PK-12 educational practice. Applicants holding a master's degree may transfer up to 15 credit hours with approval.
A student with a bachelor's degree interested in obtaining a master's degree in Psychology (M.A.) or Literacy (M. Ed.) while pursuing the Ph.D. will need to consult with the program director and the respective departments to understand the additional requirements. Applicants lacking necessary foundational coursework in previous degrees will be required to complete some remedial courses as part of their program of study in addition to the degree requirements.

Admission Requirements

Admissions are based on a comprehensive assessment of a candidate's qualifications including Graduate Record Examination (GRE) scores, undergraduate and graduate grade point average, letters of recommendation, prior professional experiences, and application essay.
Applicants are expected to have a minimum grade point average (GPA) of 3.50 in master's coursework or 2.75 for a post-bachelor's applicant.
Currently, the program admits students in Fall semester only. All students in the graduate program will be expected to satisfy a residency requirement.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must submit

1. application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. official transcripts certifying coursework from each college or university attended (a minimum GPA of 3.5 in master's coursework or 2.75 for a post-bachelor's applicant is required for admission to program);
3. a current curriculum vitae showing at least three (3) years of documented professional experience;
4. a 700 - 1000 word essay explaining how his/her background and objectives relate to the program's purpose;
5. three (3) letters of recommendation from professionals who can address the applicant's interest in literacy and potential for successfully completing a doctoral program;
6. recent GRE scores (within the last five years); preferred minimum scores are Verbal 156, Quantitative 144, and a 4.5 on Analytical Writing.

Degree Requirements

The Doctor of Philosophy (Ph.D.) in Literacy Studies with a concentration in Reading Disabilities/Dyslexia requires completion of a minimum of 75 semester hours with at least 70 percent at the 7000 level. Candidates are required to complete and successfully defend a research-based dissertation.

Curriculum: Literacy Studies, Reading Disabilities and Dyslexia

The following illustrates the minimum coursework requirements.

Major Core (36 hours)

- LITS 7010 - Literacy Development and Language Learning **3 credit hours**
- LITS 7011 - Neurobiology of Language and Literacy **3 credit hours**
- LITS 7100 - Historical Issues, Trends, and Methodologies in Literacy **3 credit hours**
- LITS 7110 - Models of Literacy Assessment **3 credit hours**
- LITS 7120 - Professional Seminar in Graduate Studies **3 credit hours**
- LITS 7130 - Literacy in the Socio-Cultural Context **3 credit hours**
- LITS 7140 - Research, Design and Methodology in Literacy **3 credit hours**
- LITS 7200 - Practicum in Literacy Studies **1 to 3 credit hours (3 credit hours required)**
- LITS 7210 - Evidence-Based Methods of Literacy Development **3 credit hours**
- LITS 7400 - Reading Comprehension: Theoretical Models and Research Methodologies **3 credit hours**

- PSY 7280 - Psychological Statistics: Regression **3 credit hours** AND
- PSY 7281 - Psychological Statistics: Regression Lab **0 credit hours**

- PSY 7290 - Psychological Statistics: ANOVA **3 credit hours** AND
- PSY 7291 - Psychological Statistics: ANOVA Lab **0 credit hours**

Reading Disabilities/Dyslexia Concentration (12 hours)

NOTE: Courses listed here are examples of those deemed appropriate. This list is not exhaustive. Substitutions may be arranged with the permission of a student's program advisor.

- CDIS 6000 - Speech, Language, and Literacy Development **3 credit hours**
- ELED 7350 - Introduction to Qualitative Methods **3 credit hours**
- LITS 7150 - Multilingualism and Literacy **3 credit hours**
- LITS 7021 - Cognitive Neuropsychology of Literacy **3 credit hours**
- PSY 6050 - Psychological Testing **3 credit hours**
- PSY 6190 - Advanced Cognitive Psychology **3 credit hours**
- PSY 6750 - Psychology and Assessment of Learning Disabilities **3 credit hours**
- READ 6750 - Research in Literacy **3 credit hours**

- DYST 6010 - Identifying Students with Dyslexia and Other Reading Difficulties **3 credit hours** OR
- DYST 7010 - Identifying Students with Dyslexia and Other Reading Difficulties **3 credit hours**

- DYST 6000 - Introduction to Dyslexia and Other Reading Difficulties **3 credit hours** OR
- DYST 7000 - Introduction to Dyslexia and Other Reading Difficulties **3 credit hours**

- DYST 6011 - Interventions for Dyslexia and Other Reading Difficulties **3 credit hours** OR
- DYST 7011 - Interventions for Dyslexia and Other Reading Difficulties **3 credit hours**

- PSY 6530 - The Psychology of Reading and Reading Development **3 credit hours** OR
- PSY 7530 - The Psychology of Reading and Reading Development **3 credit hours**

Electives (15 hours)

Choose 15 hours in consultation with the academic advisor.

Dissertation (12 hours)

- LITS 7640 - Dissertation Research **1 to 12 credit hours (minimum 12 hours)**

Literacy Studies

LITS 7010 - Literacy Development and Language Learning
3 credit hours Prerequisite: Permission of instructor. Provides an overview of the basic concepts, scope, and methodology of literacy development. Topics and issues in current literacy development are addressed while discussing major theoretical models, cognitive processes, sociocultural factors, and current methodologies. Explores the relation between literacy development and language learning.

LITS 7011 - Neurobiology of Language and Literacy
3 credit hours Prerequisite: CDIS 6000 or ENGL 7651 and permission of department. Advanced introduction to the functional anatomy of language acquisition, perception, comprehension, and production. Contemporary anatomical and functional neuroimaging techniques in research and clinical applications.

LITS 7021 - Cognitive Neuropsychology of Literacy
3 credit hours Prerequisite: LITS 7011. Reviews, methods, models, and findings of cognitive neuropsychology and their application to issues in literacy. Provides a conceptual framework for understanding the organization of cognitive abilities with an emphasis on reading, writing, and spelling.

LITS 7100 - Historical Issues, Trends, and Methodologies in Literacy
3 credit hours Prerequisite: Permission of department. Explores historical and emerging trends and issues related to literacy research methods, processes, and practices. Examines historical trends in theories of literacy development; linguistic, sociocultural, and instructional influences on literacy development; and development in academically diverse children.

LITS 7110 - Models of Literacy Assessment
3 credit hours Prerequisite: Permission of department. Examines frames of reference within which approaches to diagnostic and achievement testing reside. Topics include grade level achievement models, discrepancy models, curriculum-based assessment, process models, and value-added models.

LITS 7120 - Professional Seminar in Graduate Studies
3 credit hours Prerequisite: Permission of department. Examines the key components for success in graduate school and the skills needed for succeeding in academia. Offers broad survey of the skills (e.g., writing, publishing, ethics, etc.) and practices critical for completing graduate school.

LITS 7130 - Literacy in the Socio-Cultural Context
3 credit hours Prerequisite: CDIS 6000 or ENGL 7651. Exploration of how language and socialization patterns within families of various cultural groups (ie., Latinos, Asian Americans, African Americans, and Native Americans) may influence acquisition of literacy skills and performance in literacy instruction.

LITS 7140 - Research, Design and Methodology in Literacy
3 credit hours Prerequisite: Permission of department. Integrated review of current and historical designs and methodologies in literacy research. Analysis of theoretical principles and underlying assumptions will be addressed.

LITS 7150 - Multilingualism and Literacy
3 credit hours Prerequisite: Permission of department. Explores the relationship between multilingualism and literacy and the interplay of the dominant forces involved in shaping this often vexed relationship. Focuses on the impact of multilingualism on literacy acquisition in the North American context as well as the role of U.S. educational policies and societal attitudes on multilingual literacy development.

LITS 7200 - Practicum in Literacy Studies
1 to 3 credit hours Prerequisite: Admission to the program; good academic standing; completion of at least 20 hours of core coursework; Practicum Contract forms; permission of department. Field-based experiences, in as many as three settings, selected by the student in collaboration with the program advisor. Purpose is to expand the student's world view of a career path/field as one connected to literacy issues across a spectrum of disciplines.

LITS 7210 - Evidence-Based Methods of Literacy Development
3 credit hours Prerequisite: Permission of department. Explores context that spawned the evidence-based movement and the founding of What Works Clearinghouse. Evaluation of instructional programs and methods for reading and spelling within

the framework of scientifically based evidence of effectiveness.

LITS 7330 - Special Topics in Literacy
1 to 3 credit hours Prerequisite: Permission of department. Independent study of a particular topic selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered. Repeatable up to twelve hours.

LITS 7340 - Literature Review and Readings in Literacy
1 to 12 credit hours Prerequisites: PSY 7280 and LITS 7140 or equivalents. Supervised literature review and readings on topics of current importance in literacy studies. Topics and requirements obtained from individual faculty in the Literacy Studies Ph.D. program or from affiliated faculty. May be repeated for a total of 12 credits

LITS 7350 - Research Seminar in Literacy
1 to 12 credit hours Prerequisite: LITS 7340 or equivalent. Supervised research in the literacy studies area. Student will conduct a research project in his or her area of interest in the field of literacy studies. Topics and requirements will be obtained from individual faculty in the Literacy Studies Ph.D. program or from affiliated faculty. May be repeated for a total of 12 credits.

LITS 7400 - Reading Comprehension: Theoretical Models and Research Methodologies
3 credit hours Prerequisite: Permission of instructor. Examines the major theoretical models of comprehension, cognitive processes, and current methodologies used in comprehension research.

LITS 7410 - Applied Meta-Analysis in Education
3 credit hours Prerequisite: ALSI 7600 or PSY 7280. Covers the advantages and limitations of using meta-analyses to determine educational policy and practice. Focuses on step-by-step procedures for conducting, analyzing data, and reporting a meta-analysis on an educational research topic of student's choice.

LITS 7640 - Dissertation Research
1 to 12 credit hours Prerequisite: Permission of department. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. S/U grading.

Womack Educational Leadership

Donald Snead, Interim Chair
(615) 898-5755
www.mtsu.edu/edu_leadership/

The Specialist in Education degree (Ed.S.) is offered with majors in Administration and Supervision, Curriculum and Instruction, and Professional Counseling and the Master of Education degree (M.Ed.) with majors in Administration and Supervision and Curriculum and Instruction.

The Ed.S. in Administration and Supervision offers a specialization in instructional leader licensure (K-12 administrator license) and higher education. The Ed.S. in Curriculum and Instruction major offers a specialization in culture, cognition, and the learning process. The Ed.S. in Professional Counseling offers concentrations in Clinical Mental Health Counseling and School Counseling.

The M.Ed. in Administration and Supervision offers a concentration in Agricultural Leadership Education in addition to specializations in K-12 public schools, higher education, and nonlicensure (for off-campus cohorts).

The M.Ed. in Curriculum and Instruction offers a concentration in English as a Second Language and a specialization for the professional education coursework for teacher licensure (secondary education licensure path).

The M.L.S. in Library Science is offered.

The department offers a minor in education at the graduate level, the interdisciplinary certificate program in United States Culture and Education, and a graduate certificate in College and University Teaching.

Administration and Supervision, Agricultural Education Leadership, M.Ed.

Alanna Vaught, Program Coordinator
(615) 898-2523
Alanna.Vaught@mtsu.edu
The M.Ed. in Administration and Supervision offers a concentration in Agricultural Education Leadership as well as specializations in K-12 public school, higher education, and a nonlicensure program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Education in Administration and Supervision with a concentration in Agricultural Education Leadership requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned bachelor's degree from an accredited university or college;
3. teacher licensure. (The licensure requirement may be waived under special circumstances.)

Students pursuing an M.Ed. degree must be fully admitted prior to their initial semester of coursework.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Master of Education degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Master of Education in Administration and Supervision with a concentration in Agricultural Education Leadership requires completion of 33 semester hours.
Candidate must

1. complete 33 semester credit hours: 9 hours of required courses (Educational Foundations, Analysis and Application of Educational Research and studies in Leadership), 12 hours of specialized core courses, and 12 elective hours). The 12 specialized core hours are housed in the School of Agriculture (History of Agricultural Education, Program Development of for Agricultural Leaders, Foundations of Agricultural Leadership, Diffusion of Innovation and Group, Team, and Organizational development in Agricultural Organizations). The 12 elective hours are selected with an advisor based on the career plans of the student.
2. successfully complete a written comprehensive examination during the semester of graduation (exam may be taken once).

Curriculum: Administration and Supervision, Agricultural Education Leadership

The following illustrates the coursework requirements.

Core Courses (9 hours)

- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- SPSE 6080 - Studies in Leadership **3 credit hours**

Concentration Courses (12 hours)

- AGED 6010 - History and Philosophy of Agricultural Education **3 credit hours**
- AGED 6020 - Principles of Agricultural Leadership **3 credit hours**
- AGED 6030 - Theoretical Foundations of Personal Agricultural Leadership **3 credit hours**
- AGED 6050 - Leadership Development in Agricultural Organizations **3 credit hours**

Electives (12 hours)

- Guided or general electives **12 credit hours**

Administration and Supervision, Ed.S.

James Huffman, Program Director
(615) 898-2201
Jim.Huffman@mtsu.edu
The Ed.S. in Administration and Supervision offers specializations in instructional leader licensure program (K-12 Administrator license) and higher education.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission into the Educational Specialist in Administration and Supervision program requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned master's degree from an accredited university or college;
3. teacher licensure—the licensure requirements will be waived for the specialization in higher education as well as under other special circumstances.

NOTE: Students pursuing an Ed.S. degree must be fully admitted to the program prior to the completion of their initial semester of coursework.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Educational Specialist degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Ed.S. in Administration and Supervision requires completion of a minimum of 30 semester hours.
Candidate must

1. complete a minimum of 30 semester hours with a minimum of 15 semester hours at the 7000 level (see Curriculum section below for specifics);
2. successfully complete a written comprehensive examination or oral presentation of research project during the semester of graduation (exam may be retaken once during a subsequent semester).

Curriculum: Administration and Supervision

The following illustrates the minimum coursework requirements.

Required Courses (12 hours)

- SPSE 7200 - Administrative Behavior: Theory into Practice **3 credit hours**
- FOED 7060 - Seminar in Educational Foundations **3 credit hours**

Select either research path

- SPSE 7010 - Educational Research Methodology **3 credit hours**
- FOED 7610 - Directed Individual Educational Research **3 credit hours**

or the practicum path

- SPSE 7190 - Professional Field Experience **6 credit hours**

Specialized Core (12 hours)

Selected with an advisor with at least 3 hours at the 7000 level

Electives (6 hours)

Selected with advisor

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Administration and Supervision, Higher Education Specialization, Ed.S.

James Huffman, Program Director
(615) 898-2201
Jim.Huffman@mtsu.edu
The Ed.S. in Administration and Supervision offers specializations in higher education and instructional leader licensure (K-12 administrator license).
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission into the Educational Specialist in Administration and Supervision with a specialization in higher education program requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned master's degree from an accredited university or college;
3. teacher licensure-the licensure requirements will be waived for the specialization in higher education as well as under other special circumstances.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Educational Specialist degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Ed.S. in Administration and Supervision with a higher education specialization requires completion of 30 semester hours.
Candidate must

1. complete 30 semester hours with a minimum of 15 semester hours at the 7000 level (see Curriculum section below for specifics);
2. successfully complete a written comprehensive examination or oral presentation of research project during the semester of graduation (exam may be retaken once).

Curriculum: Administration and Supervision, Higher Education

The following illustrates the coursework requirements.

Required Courses (24 hours)

- FOED 7520 - Evaluation in Higher Education **3 credit hours**
- FOED 7580 - The College Student **3 credit hours**
- SPSE 7005 - Student Affairs in Higher Education **3 credit hours**
- SPSE 7007 - Student Success in Higher Education **3 credit hours**
- SPSE 7080 - Studies in Leadership **3 credit hours**
- SPSE 7210 - Legal Issues in Higher Education **3 credit hours**
- SPSE 7540 - Overview of Higher Education **3 credit hours**
- SPSE 7551 - Instructional Development in Higher Education **3 credit hours**

Electives (6 hours)

Choose two courses from the following:

- FOED 7060 - Seminar in Educational Foundations **3 credit hours**
- FOED 7519 - Measurement and Assessment in Higher Education **3 credit hours**
- FOED 7570 - Issues in Higher Education **3 credit hours**
- FOED 7571 - The Ethics of Higher Education **3 credit hours**
- SPSE 7001 - College Teaching Practicum **3 credit hours**
- SPSE 7530 - Administration of Higher Education **3 credit hours**
- SPSE 7905 - Online Course Development for Higher Education **3 credit hours**

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Administration and Supervision, Higher Education Specialization, M.Ed.

James Huffman, Program Director
(615) 898-2201
Jim.Huffman@mtsu.edu
The M.Ed. in Administration and Supervision offers a concentration in Agricultural Education Leadership as well as specializations in K-12 public school, higher education, and a nonlicensure program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Education in Administration and Supervision with a specialization in higher education requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned bachelor's degree from an accredited university or college;
3. teacher licensure-the licensure requirements will be waived for the higher education specialization and under other special circumstances.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential on completing the Master of Education degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Master of Education in Administration and Supervision with a specialization in higher education requires completion of 33 semester hours.
Candidate must

1. complete 33 semester hours. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours (see Curriculum section below for specifics);
2. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once).

Curriculum: Administration and Supervision, Higher Education

The following illustrates the coursework requirements.

Required Courses (27 hours)

- FOED 6520 - Evaluation in Higher Education **3 credit hours**
- FOED 6580 - The College Student **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- SPSE 6005 - Student Affairs in Higher Education **3 credit hours**
- SPSE 6007 - Student Success in Higher Education **3 credit hours**
- SPSE 6080 - Studies in Leadership **3 credit hours**
- SPSE 6210 - Legal Issues in Higher Education **3 credit hours**
- SPSE 6540 - Overview of Higher Education **3 credit hours**
- SPSE 6551 - Instructional Development in Higher Education **3 credit hours**

Electives (6 hours)

Choose two courses from the following:

- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6519 - Measurement and Assessment in Higher Education **3 credit hours**
- FOED 6570 - Issues in Higher Education **3 credit hours**
- FOED 6571 - The Ethics of Higher Education **3 credit hours**
- SPSE 6530 - Administration of Higher Education **3 credit hours**
- SPSE 6905 - Online Course Development for Higher Education **3 credit hours**

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Administration and Supervision, Instructional Leader Licensure Program Specialization, Ed.S.

Marvin Peyton, Program Director
(615) 585-8310
Marvin.Peyton@mtsu.edu
The Ed.S. in Administration and Supervision offers specializations in higher education and instructional leader licensure program (K-12 administrator license).
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission into the Educational Specialist in Administration and Supervision with a specialization in instructional leader licensure (K-12 administrator license) program requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned master's degree from an accredited university or college;
3. teacher licensure-the licensure requirements will be waived for the specialization in higher education as well as under other special circumstances.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Educational Specialist degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Ed.S. in Administration and Supervision with an instructional leader licensure program specialization requires completion of 33 semester hours.
Candidate must

1. complete 33 semester hours with a minimum of 15 semester hours at the 7000 level (see Curriculum section below for specifics);
2. successfully complete a written comprehensive examination or oral presentation of research project during the semester of graduation (exam may be retaken once);
3. pass the Praxis School Leader Licensure Assessment.

Curriculum: Administration and Supervision, Instructional Leader Licensure

The following illustrates the coursework requirements.

Required Courses (33 hours)

- FOED 6030 - School and Community Relations **3 credit hours**
- FOED 7060 - Seminar in Educational Foundations **3 credit hours**
- FOED 7610 - Directed Individual Educational Research **3 credit hours**
- SPSE 6010 - Organization and Administration of Public Schools **3 credit hours**
- SPSE 6050 - Instructional Leadership **3 credit hours**
- SPSE 6340 - School Finance **3 credit hours**
- SPSE 6390 - School Law **3 credit hours**
- SPSE 7010 - Educational Research Methodology **3 credit hours**
- SPSE 7040 - Seminar in Supervision **3 credit hours**
- SPSE 7150 - Curriculum Study and Instructional Design **3 credit hours**
- SPSE 7200 - Administrative Behavior: Theory into Practice **3 credit hours**

NOTE:

The program is offered only in the off-campus cohort format. For further information, contact Dr. Marvin Peyton in the Womack Educational Leadership Department.

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Administration and Supervision, K-12 Public School Specialization, M.Ed.

Marvin Peyton, Program Director
(615) 585-8310
Marvin.Peyton@mtsu.edu
The M.Ed. in Administration and Supervision offers a concentration in Agricultural Education Leadership as well as specializations in K-12 public school, higher education, and a nonlicensure program.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Education in Administration and Supervision with a specialization in K-12 public school requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned bachelor's degree from an accredited university or college;
3. teacher licensure-the licensure requirements will be waived for the higher education specialization and under other special circumstances.

Students pursuing an M.Ed. degree must be fully admitted by the Educational Leadership Graduate Admissions Board prior to the completion of their initial semester of coursework.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit official transcripts of previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Master of Education degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Master of Education in Administration and Supervision with a specialization in K-12 public school requires completion of a minimum of 33 semester hours.
Candidate must

1. complete 33 semester hours. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours (see Curriculum section below for specifics);
2. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once);
3. pass the Praxis School Leader Licensure Assessment.

Curriculum: Administration and Supervision, K-12 Public School

The following illustrates the minimum coursework requirements.

Required Courses (33 hours)

- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6030 - School and Community Relations **3 credit hours**
- SPSE 6010 - Organization and Administration of Public Schools **3 credit hours**
- SPSE 6040 - Supervision of Instruction **3 credit hours**
- SPSE 6050 - Instructional Leadership **3 credit hours**
- SPSE 6340 - School Finance **3 credit hours**
- SPSE 6390 - School Law **3 credit hours**
- SPSE 6400 - The Principalship **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**
- SPSE 6550 - Supervised Field Experience **3 or 6 credit hours**
- SPSE 6560 - Studies in Education: Supervision **1 to 3 credit hours**

Note:

This program is offered only in the off-campus cohort format. For further information contact Dr. Marvin Peyton in the Womack Educational Leadership Department.

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.
Candidate must

1. file a degree plan with the College of Graduate Studies prior to admission into the program;
2. file a Notice of Intent to Graduate form in the College of Graduate Studies within the first two weeks of the semester in which the student intends to graduate.

Administration and Supervision, Nonlicensure Program, M.Ed.

Marvin Peyton, Program Director
(615) 585-2201
Marvin.Peyton@mtsu.edu
The M.Ed. in Administration and Supervision offers a concentration in Agricultural Education Leadership as well as specializations in K-12 public school, higher education, and a nonlicensure program.
Please see undergraduate catalog for information regarding undergraduate programs.
NOTE: This program is restricted to off-campus cohorts.

Admission Requirements

Admission to the Master of Education in Administration and Supervision with a nonlicensure specialization requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned bachelor's degree from an accredited university or college;
3. teacher licensure--the licensure requirements will be waived for the higher education specialization and under other special circumstances.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Master of Education degree in Administration and Supervision;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license.

Degree Requirements

The Master of Education in Administration and Supervision with a nonlicensure specialization requires completion of a minimum of 33 semester hours.
Candidate must

1. complete 33 semester hours. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours (see Curriculum section below for specifics);
2. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once during a subsequent semester).

Curriculum: Administration and Supervision, Nonlicensure

The following illustrates the coursework requirements.

Required Courses (33 hours)

- SPSE 6010 - Organization and Administration of Public Schools **3 credit hours**
- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6030 - School and Community Relations **3 credit hours**
- SPSE 6040 - Supervision of Instruction **3 credit hours**

- SPSE 6050 - Instructional Leadership **3 credit hours**
- SPSE 6390 - School Law **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- SPSE 6640 - Digital Learning in the K-12 Educational Setting **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**
- SPSE 6250 - Seminar in Curriculum Improvement **3 credit hours**

Note:

This is NOT a program for a Tennessee School Administrator license. Contact the Womack Educational Leadership Department for more information.

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.
Candidate must

1. file a degree plan with the College of Graduate Studies prior to entry into the program;
2. file a Notice of Intent to Graduate form in the College of Graduate Studies within the first two weeks of the semester in which the student intends to graduate.

College and University Teaching Certificate

Jim Huffman, Program Director
(615) 898-2201
Jim.Huffman@mtsu.edu
This certificate program offered by the Womack Educational Leadership Department has as its central goal, the preparation of students to competently assume the duties of a faculty member in an institution of higher education upon the completion of their doctoral studies. To accomplish this goal, this program includes instruction and experiences that offer preparation to develop future faculty members who

- are able to apply appropriate instructional techniques to meet specific learning goals;
- are able to effectively and independently instruct a class as instructor of record, including developing a syllabus, preparing course-appropriate learning activities, and evaluating student performance;
- are able to demonstrate understanding of the interrelationship between scholarship, teaching, and research for college and university faculty members;
- are skilled with technology in the classroom, distance and e-learning, presentation techniques, and instructional design; and
- will have a verifiable credential documenting preparation for and skill in teaching at the college/university level.

Admission Requirements

Admission to the College and University Teaching certificate program requires

1. being fully admitted into a terminal degree program at MTSU or a terminal degree;
2. an acceptable grade point average in all college work taken or have earned a terminal degree.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. be fully admitted to the College of Graduate Studies;
2. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
3. submit official transcripts of all previous college work.

Certificate Requirements

Once admitted to the program, candidates for the graduate certificate in College and University Teaching must

1. maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate;
2. successfully complete a minimum of four (4) approved workshops delivered by the Learning, Teaching, and Innovative Technologies Center or another center approved by the College of Graduate Studies. One of these workshops must have an e-learning or online teaching focus.
3. create a teaching portfolio.

Curriculum: College and University Teaching

Candidate must complete 12 hours in the following course of study:

Major Field Course (9 hours)

- FOED 7519 - Measurement and Assessment in Higher Education **3 credit hours**
- SPSE 7551 - Instructional Development in Higher Education **3 credit hours**
- SPSE 7905 - Online Course Development for Higher Education **3 credit hours**

Teaching Practicum (3 hours)

- SPSE 7001 - College Teaching Practicum **3 credit hours**
  NOTE: If available, a program-specific teaching practicum may be substituted for SPSE 7001.

Program Notes

- Students may transfer up to six (6) credit hours of approved coursework into the certificate program.
- The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.

Curriculum and Instruction, Culture, Cognition, and the Learning Process Specialization, Ed.S.

Barbara Young, Program Director
(615) 898-2209
Barbara.Young@mtsu.edu
The Ed.S. in Curriculum and Instruction major offers a specialization in Culture, Cognition, and the Learning Process. This online degree program provides an opportunity to consider the impact and influence that cultural circumstances, mental processes, and contributions to neuroscience have on learning and teaching in general. Onsite options may be available for some courses.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Educational Specialist in Curriculum and Instruction with a specialization in culture, cognition and the learning process requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Teacher license;
2. an earned master's degree from an accredited university or college;
3. a grade point average (GPA) in previous academic work that reflects potential for success in the Ed.S.;
4. a valid teaching license. The licensure requirement may be waived under special circumstances.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation;
3. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or copy of a valid Teaching license;
4. submit official transcripts of all previous college work.

Degree Requirements

The Ed.S. in Curriculum and Instruction with an instruction, culture, cognition, and the learning process specialization requires completion of 30 semester hours.
Once admitted to the program, candidate must

1. complete 30 semester hours, with a minimum of 15 at the 7000 level (see specifics in Curriculum section below);
2. successfully complete a written comprehensive examination or research project during the semester of graduation (exam may be retaken once).

Curriculum: Curriculum and Instruction, Culture, Cognition, and the Learning Process

The following illustrates the coursework requirements.

Required Core (15 hours)

- FOED 7060 - Seminar in Educational Foundations **3 credit hours**
- FOED 7610 - Directed Individual Educational Research **3 credit hours**
- SPSE 7010 - Educational Research Methodology **3 credit hours** *
- SPSE 7020 - Classroom Management: Methods and Models **3 credit hours**
- SPSE 7170 - Learning Theories and the Educational Process **3 credit hours**
  Note: SPSE 7010 is a prerequisite to FOED 7610

Specialized Core (12 hours)

- SPSE 7710 - Historical and Social Contexts of Multicultural Education **3 credit hours**
- SPSE 7720 - Brain-Based Teaching and Learning in the Classroom **3 credit hours**
- SPSE 7730 - Human Diversity in a Variety of Learning Environments **3 credit hours**
- FOED 7080 - Contributions of Psychology to Education **3 credit hours**

Elective (3 hours)

Choose one from the following:

- FOED 6211 - Educational Psychology for Classroom Teachers **3 credit hours**
- FOED 6850 - Cultural Issues in Education **3 credit hours**
- SPSE 7130 - The Curriculum: Structures and Functions **3 credit hours**

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Curriculum and Instruction, Ed.S.

Marvin Peyton, Off-Campus Program Director
(615) 585-8310
Marvin.Peyton@mtsu.edu
The Curriculum and Instruction program is designed to foster the development of teaching skills that result in increased pupil performance.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Educational Specialist in Curriculum and Instruction programs requires

1. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license;
2. an earned master's degree from an accredited university or college;
3. a grade point average (GPA) in previous academic work that reflects potential for success in the Ed.S.;
4. a valid teaching license. The licensure requirement may be waived under special circumstances**.**

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation;
3. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or copy of valid Tennessee Teacher License.
4. submit official transcripts of all previous college work.

Degree Requirements

The Ed.S. in Curriculum and Instruction requires completion of 30 semester hours.
Once admitted to the program, candidate must

1. complete 30 semester hours, with a minimum of 15 at the 7000 level (see specifics in Curriculum section below);
2. successfully complete a written comprehensive examination or oral presentation of research project during the semester of graduation (exam may be retaken once).

Curriculum: Curriculum and Instruction

The following illustrates the coursework requirements.

Required Courses (12 hours)

- SPSE 7130 - The Curriculum: Structures and Functions **3 credit hours**
- FOED 7060 - Seminar in Educational Foundations **3 credit hours**

Select either research path

- SPSE 7010 - Educational Research Methodology **3 credit hours**
- FOED 7610 - Directed Individual Educational Research **3 credit hours**

or practicum path

- SPSE 7190 - Professional Field Experience **6 credit hours**

Specialized Core (12 hours)

Selected with approval of advisor (at least 3 hours must be at 7000 level)

Electives (6 hours)

Selected in consultation with advisor

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Curriculum and Instruction, English as a Second Language Concentration, M.Ed.

Dorothy Valcarcel Craig, Program Director
(615) 898-2332
Dorothy.Craig@mtsu.edu, www.eslatmtsu.com
The M.Ed. in Curriculum and Instruction offers a concentration in English as a Second Language with several licensure options:

- The degree with add-on licensure endorsement in ESL (PreK-12) is designed for those candidates who already hold an initial license for teaching in Tennessee;
- The degree with initial license in ESL (PreK-12) is designed for those candidates who do not hold an initial license for teaching in Tennessee and who plan to complete the requirements for professional licensure at the initial level;
- The add-on only program may be completed for endorsement only (non-degree; licensure only);
- The M.Ed. in Curriculum and Instruction also offers a specialization for the professional education coursework for teacher licensure (Secondary Education Licensure Path) in a state-approved licensure

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

For admission into the master's program, a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II (Principles of Learning and Teaching) or a valid Tennessee Teacher license is required.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Master of Education degree in Curriculum and Instruction;
4. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) or a copy of the teaching license;
5. submit copy of Tennessee Teaching license (for those holding initial license);
6. submit copy of Tennessee driver's license.

Degree Requirements with Add-On Endorsement in ESL

The Master of Education in Curriculum and Instruction with a concentration in English as a Second Language requires completion of 33 semester hours. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours.
Candidate must

1. hold a bachelor's degree;
2. hold an initial Tennessee teaching license. Non-licensure students must meet entry testing requirements for graduate studies (MAT or GRE score).
3. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once during a subsequent semester).

Curriculum: Curriculum and Instruction, English as a Second Language with Add-On Endorsement in ESL

The following illustrates the coursework requirements.

Core Courses (15 hours)

- FOED 6022 - Foundations, History, and Legal Aspects of ESL and Bilingual Education **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- FOED 6620 - Action Research for Practitioner-Based Learning Environments **3 credit hours**
- FOED 6860 - Education and Digital Youth: Language Learning in a Participatory Culture **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**

Required Courses (18 hours)

- SPSE 6800 - Curriculum Design and Instruction for ELs **3 credit hours**
- SPSE 6820 - Second Language Acquisition: Language, Culture, Theory, Practice **3 credit hours**
- SPSE 6830 - Assessment and Evaluation of English Language Learners **3 credit hours**
- SPSE 6712 - Fieldwork and Professional Collaboration in ESL Classrooms **3 credit hours**
- YOED 6020 - Literacy and Content Instruction for ELs **3 credit hours**
- YOED 6030 - Methods, Instruction, and Assessment for Teaching ELs in Regular Education Classrooms **3 credit hours**

Degree Requirements for Initial Licensure in ESL

The Masters of Education in Curriculum and Instruction with a concentration in English as a Second Language (with initial license) requires completion of 33 semester hours and 9 hours of Directed Student Teaching. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours.
Candidates must:

1. hold a bachelor's degree;
2. meet entry testing requirements for Graduate Studies (MAT or GRE score);
3. meet requirements for admission to Teacher Education;
4. successfully complete one semester of Directed Student Teaching;
5. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once during subsequent semester).

Curriculum: Curriculum and Instruction, English as a Second Language with Initial Licensure in ESL

The following illustrates the coursework requirements.

Core Courses (15 hours)

- FOED 6022 - Foundations, History, and Legal Aspects of ESL and Bilingual Education **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- FOED 6620 - Action Research for Practitioner-Based Learning Environments **3 credit hours**
- FOED 6860 - Education and Digital Youth: Language Learning in a Participatory Culture **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**

Required Courses (18 hours)

- SPSE 6800 - Curriculum Design and Instruction for ELs **3 credit hours**
- SPSE 6820 - Second Language Acquisition: Language, Culture, Theory, Practice **3 credit hours**
- SPSE 6830 - Assessment and Evaluation of English Language Learners **3 credit hours**
- SPSE 6712 - Fieldwork and Professional Collaboration in ESL Classrooms **3 credit hours**
- YOED 6020 - Literacy and Content Instruction for ELs **3 credit hours**
- YOED 6030 - Methods, Instruction, and Assessment for Teaching ELs in Regular Education Classrooms **3 credit hours**

Directed Student Teaching (9 hours)

- YOED 5110 - Directed Teaching, Grades 7-12 **9 to 12 credit hours** OR
- YOED 5510 - The Teaching Internship, Grades 7-12 **3 to 9 credit hours**

English as a Second Language Add-On Endorsement (non-degree)

Candidates for the Add-On Endorsement (non-degree) program must:

1. hold a bachelor's degree;
2. hold an initial license for teaching in Tennessee.

Required Courses (12 hours)

Candidates must complete 12 hours in the following course of study. The licensure coursework may be transferred to the full degree program. Please check with current catalog for program changes and updates.

- SPSE 6712 - Fieldwork and Professional Collaboration in ESL Classrooms **3 credit hours**
- SPSE 6800 - Curriculum Design and Instruction for ELs **3 credit hours**
- SPSE 6820 - Second Language Acquisition: Language, Culture, Theory, Practice **3 credit hours**
- SPSE 6830 - Assessment and Evaluation of English Language Learners **3 credit hours**
- YOED 6020 - Literacy and Content Instruction for ELs **3 credit hours**
- YOED 6030 - Methods, Instruction, and Assessment for Teaching ELs in Regular Education Classrooms **3 credit hours**

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students, Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Curriculum and Instruction, M.Ed.

Ashlee Hover, Program Director
(615) 904-8187
Ashlee.Hover@mtsu.edu
The Curriculum and Instruction program is designed to foster the development of teaching skills that result in increased pupil performance. By analyzing curriculum choices and strategies, along with best teaching practices, those who complete this program will be better equipped to provide an environment in which students engage in relevant and meaningful learning activities.
The ONLINE Master of Education in Curriculum and Instruction (Non-Licensure) Generalist Program requires completion of 33 hours of ONLINE COURSES.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Education in Curriculum and Instruction (non-licensure) online program requires

1. an earned bachelor's degree from an accredited university or college;
2. at least one of the following:

- a satisfactory score on the Miller Analogies Test
- a satisfactory score on the Graduate Record Examination
- a satisfactory score on a teacher licensure test (examples could include: Praxis II or edTPA)
- a valid teacher license
- an undergraduate GPA of 2.75 or above
- for those who have started but not completed a graduate degree, a GPA of 3.00 or above on the last 60 hours of coursework (undergraduate and graduate) completed
- a completed graduate degree with a GPA of 3.00 or above.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation addressing the applicant's potential for completing the Master of Education degree in Curriculum and Instruction;
4. submit official scores on the Graduate Record Examination (GRE), Miller Analogies Test (MAT), or Praxis II or a copy of the teaching license.

Degree Requirements

The Master of Education in Curriculum and Instruction requires completion of 33 semester hours.
Once admitted to the program, candidate must

1. complete 33 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours (see specifics in Curriculum section below);
2. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once).

Curriculum: Curriculum and Instruction

The online Master of Education in Curriculum and Instruction (non-licensure) generalist program requires completion of 33 hours of required online courses. The following illustrates the coursework requirements and the online course rotation.

Required Courses (33 hours)

- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6030 - School and Community Relations **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- FOED 6630 - Educational Tests and Measurements **3 credit hours**
- SPSE 6140 - Teacher Leadership for School Improvement **3 credit hours**
- SPSE 6250 - Seminar in Curriculum Improvement **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**
- SPSE 6450 - Elementary and Middle School Curriculum **3 credit hours**
- SPSE 6480 - Instructional Excellence in Secondary Schools **3 credit hours**
- SPSE 6640 - Digital Learning in the K-12 Educational Setting **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**

Online Course Rotation

Fall Semester One

- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6630 - Educational Tests and Measurements **3 credit hours**

Spring Semester One

- SPSE 6250 - Seminar in Curriculum Improvement **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**

Summer

- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- SPSE 6140 - Teacher Leadership for School Improvement **3 credit hours**
- SPSE 6430 - Introduction to Curriculum Development **3 credit hours**

Fall Semester Two

- SPSE 6480 - Instructional Excellence in Secondary Schools **3 credit hours**
- SPSE 6640 - Digital Learning in the K-12 Educational Setting **3 credit hours**

Spring Semester Two

- FOED 6030 - School and Community Relations **3 credit hours**
- SPSE 6450 - Elementary and Middle School Curriculum **3 credit hours**

Program Notes

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree-seeking students. Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

Curriculum and Instruction, Secondary Education Licensure Path Specialization, M.Ed.

Terry Goodin, Program Director
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The M.Ed. in Curriculum and Instruction is designed to foster the development of teaching skills that result in increased pupil performance. By analyzing curriculum choices and strategies, along with best teaching practices, those who complete this program will be better equipped to provide an environment in which students engage in relevant and meaningful learning activities.

The Secondary Licensure Path Specialization is designed to allow graduate students to meet the State of Tennessee initial licensure requirements in secondary education while pursuing a Masters degree in Curriculum and Instruction. Candidates in this program must meet all requirements in the major areas of study, any undergraduate requirements, and all education courses needed to obtain an initial teaching license. In addition to any academic courses needed, students must meet admission requirements for both the College of Education Teacher Education Program and Educational Leadership's graduate program; successfully complete and pass all required clinical experiences; and pass all parts of the required culminating exams (Praxis II [NTE] Exams, Graduate Comprehensive Exams, and the edTPA Exam). The program is 33-39 hours depending on student's status, prior coursework, and hours required for the teaching practicum. Completion of this Master's program does not guarantee licensure, but fulfills all education requirements necessary for an initial license in secondary education.

The program is structured as an on-campus cohort program and, depending on student's transcript analysis, should last around five semesters. Applications for the program are being accepted throughout the year for the next fall semester cohort.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Education in Curriculum and Instruction with a specialization in secondary education licensure path requires

1. an earned bachelor's degree from an accredited university or college;
2. an undergraduate GPA of 2.75 or above, or for those who have started but not completed a graduate degree, a GPA of 3.00 or above on the last 60 hours of coursework (undergraduate and graduate) completed, or a completed graduate degree GPA of 3.00 or above;
3. a satisfactory score on the Miller Analogies Test, the Graduate Record Examination, or the Praxis II content area exam(s) for which the candidate is seeking licensure;
4. successful admission to the College of Education Teacher Education Program.

Specifics on these requirements can be found online (www.mtsu.edu/programs/curriculum-instruction-med-secondary-licensure/index.php).

Application Procedures

Applicants must be admitted to the College of Education Teacher Education Program prior to admission to this program.

Applicants must submit the following application materials to the College of Graduate Studies:

1. an application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials. When filling out the application, the degree sought is M.Ed: the major is Curriculum and Instruction; the specialization is Secondary Education Licensure Path. This degree is a non-thesis option.
2. official transcripts of all previous college work;
3. three letters of recommendation addressing the applicant's potential for completing the Master of Education degree in Curriculum and Instruction;

4. official scores on the Miller Analogies Test (MAT), the Graduate Record Examination (GRE), or the Praxis II content area exam(s) for which the candidate is seeking licensure.

Specifics on these requirements can be found online (www.mtsu.edu/programs/curriculum-instruction-med-secondary-licensure/index.php).

Degree Requirements

The Master of Education in Curriculum and Instruction with the secondary education licensure path requires completion of a minimum of 33 semester hours.

Once admitted to the program, candidate must

1. complete 33-39 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours (see specifics in Curriculum section below);
2. successfully complete all clinical experiences, including one semester of a Teaching Internship;
3. successfully complete all courses and exams required for licensure;
4. successfully complete a written comprehensive examination during the semester of graduation (exam may be retaken once).

Curriculum: Curriculum and Instruction, Secondary Education Licensure Path

The following illustrates the minimum coursework requirements.

Required Courses (9 hours)

- FOED 6020 - Educational Foundations **3 credit hours**
- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**

Specialized Core (24-30 hours)

- YOED 6500 - Planning and Assessment **3 credit hours**
- YOED 6000 - Classroom Management **3 credit hours**
- YOED 6300 - Problem-Based Instructional Strategies **3 credit hours**
- SPSE 6140 - Teacher Leadership for School Improvement **3 credit hours**
- YOED 6030 - Methods, Instruction, and Assessment for Teaching ELs in Regular Education Classrooms **3 credit hours**

- YOED 6120 - Residency I: Grades K-12 Graduate **6 credit hours** OR
- YOED 6220 - Seminar in edTPA Professional Performance **6 credit hours**
  (appropriate course selected in consultation with an advisor)

- YOED 5510 - The Teaching Internship, Grades 7-12 **3 to 9 credit hours**

Cohort Course Rotation: Curriculum and Instruction, Secondary Licensure Path

Fall Semester

- FOED 6020 - Educational Foundations **3 credit hours**
- YOED 6500 - Planning and Assessment **3 credit hours**

Spring Semester

- YOED 6300 - Problem-Based Instructional Strategies **3 credit hours**
- YOED 6680 - Issues and Trends in Teaching and Learning **3 credit hours**

Summer Term

- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- SPSE 6140 - Teacher Leadership for School Improvement **3 credit hours**

- YOED 6120 - Residency I: Grades K-12 Graduate **6 credit hours** OR
- YOED 6220 - Seminar in edTPA Professional Performance **6 credit hours**
  (appropriate course selected in consultation with an advisor)

Fall Semester

- YOED 6000 - Classroom Management **3 credit hours**
- YOED 6030 - Methods, Instruction, and Assessment for Teaching ELs in Regular Education Classrooms **3 credit hours**
- YOED 6120 - Residency I: Grades K-12 Graduate **6 credit hours**

Spring Semester

- YOED 5510 - The Teaching Internship, Grades 7-12 **3 to 9 credit hours**

Program Notes

Students enrolling in 6000-level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree.

Education Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Library Science, M.L.S.

Frank Lambert, Program Director
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The Master of Library Science (M.L.S.) degree is an online program offered by the Womack Educational Leadership Department. The program is intended to prepare graduates to lead and educate in school, public, and corporate libraries.
MTSU's M.L.S. program is seeking precandidacy status by the Committee on Accreditation of the American Library Association. Precandidacy status is an indication that MTSU's M.L.S. program has voluntarily committed to participate in the ALA accreditation process and is actively seeking accreditation. Precandidacy does not indicate that the program is accredited nor does it guarantee eventual accreditation of the program by ALA.

Vision of the Library Science Program

MTSU's Library Science program seeks to produce candidates with strong practitioner credentials. Graduates will possess the skills, knowledge, and dispositions to serve as librarians in any setting in order to enrich the life of the individual and support the progress of society.

Admission Requirements

Admission to the master's program in Library Science requires

1. an earned bachelor's degree from an accredited university or college;
2. official transcripts from all previous college-and university-level work showing a minimum grade point average (GPA) of 2.75;
3. three letters of recommendations from professionals;
4. 500-word essay (Statement of Purpose) regarding applicant's reasons for seeking the MLS at MTSU.

NOTE: ***A current teacher's license or passing score on Praxis I is required for those interested only in school library endorsement.***

Application Procedures

All application materials are to be submitted to the College of Graduate Studies, not the program director.
Applicant must submit

1. an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. official transcripts of previous college work;
3. three letters of recommendation addressing the applicant's potential for completing the Master of Library Science degree;
4. 500-word essay (Statement of Purpose) regarding applicant's reasons for seeking the MLS at MTSU.

Degree Requirements

The Master of Library Science requires completion of a minimum of 36 semester hours.
Once admitted to the program, candidate must

1. complete 36 semester hours which includes a 15-hour major field core, a 3-hour library administration course, 9 hours of electives, 6 hours of field experience, and a 3-hour capstone course.
2. complete an e-portfolio on a web-based site as he/she moves through the program to be assessed by at least two faculty members.

Curriculum: Library Science (36 hours)

The following illustrates the minimum coursework requirements.

Major Field Core (15 hours)

- LIBS 6000 - Librarianship **3 credit hours**
- LIBS 6015 - Introduction to Information Intermediation, Resources, and Instruction **3 credit hours**
- LIBS 6020 - Organization of Information **3 credit hours**
- LIBS 6030 - Information Technology for Information Professionals **3 credit hours**
- LIBS 6060 - Understanding Research for Evaluation in Libraries **3 credit hours**

Administration (3 hours)

- LIBS 6105 - School Library Management **3 credit hours** OR
- LIBS 6100 - Management of Libraries **3 credit hours**

Field Experience (6 hours) OR Student Teaching (9 hours)

- LIBS 6550 - Supervised Field Experience in Library Science **3 to 6 credit hours (take twice)** OR
- YOED 5110 - Directed Teaching, Grades 7-12 **9 to 12 credit hours (9 credit hours required)**
  NOTE: ***Those seeking an initial teaching license should consult with the program director and licensure office.***

Electives (12 hours)

MLS students must complete 12 elective credit hours from any LIBS 6000-level courses. Non-LIBS courses may be substituted with permission of advisor.

- LIBS 6115 - Collection Development and User Services **3 credit hours**
- LIBS 6201 - Public Libraries **3 credit hours**
- LIBS 6310 - Materials for Literacy of Children **3 credit hours**
- LIBS 6311 - Materials for Literacy of Young People and Adults **3 credit hours**
- LIBS 6320 - Information Searching Strategies **3 credit hours**
- LIBS 6330 - Digital Library Collections **3 credit hours**
- LIBS 6340 - Integration of Learning Theory, Programs, and Technology **3 credit hours**
- LIBS 6345 - Instructional Strategies for Information Professional **3 credit hours**
- Must complete exitPortfolio with passing grade

Professional Counseling, Clinical Mental Health Counseling Concentration, Ed.S.

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The Ed.S. in Professional Counseling offers concentrations in Clinical Mental Health Counseling and School Counseling. The goal of the Clinical Mental Health Counseling concentration is to prepare students to provide professional counseling services in mental health-related settings. Students are offered preparation to diagnose and treat select mental and emotional disorders and to promote optimal mental health.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Professional Counseling program is not automatic for students meeting minimum admission requirements. Admissions decisions for the Professional Counseling program will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study in this area. Successful applicants typically have demonstrated the following:

1. 3.00 or higher undergraduate GPA (If an applicant's GPA is lower than 3.00, Professional Counseling faculty will consider applicant's academic performance during the last 60 hours of his or her undergraduate program);
2. Completion of an undergraduate course in abnormal psychology with a minimum grade of B;
3. A score of 146 or higher on the verbal section of the Graduate Record Exam (GRE) or 385 or higher on the Miller Analogies Test (MAT) for applicants whose overall undergraduate grade point averages are below 3.50. A graduate admissions test score is not required for applicants with overall undergraduate grade point averages of 3.5 or above (on a 4.00 scale).
4. Three positive references on Professional Counseling recommendation form;
5. A written essay/statement of purpose on the supplemental application form in which the applicant's reason for pursing a master's degree in Professional Counseling with a concentration in Clinical Mental Health Counseling is congruent with the focus/emphasis of the program;
6. Resume that includes name, address, and phone number of applicant; school applicant attended and applicant's major, minor, and grade point average; honors and awards; and employment and volunteer experiences;
7. If invited, participate in a half-day interview within the first six (6) hours of coursework (invitation based on how the applicant compares to other applicants in relation to the previous six requirements). The interview is conducted by Professional Counseling faculty, a practicing mental health professional, and school counselor. An invited applicant must review the Professional Counseling handbook and the most current version of the American Counseling Association Code of Ethics prior to the interview day and agree in writing to abide by the contents of those documents-should they be admitted into the program-on the day of the interview. Applicant must receive a positive recommendation from the faculty and counselors for program admission.

Note: Meeting minimum requirements for program admission does not guarantee admission, as applicants are selected on a competitive basis.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application materials for Summer/Fall admission must be submitted by February 10; September 10 is the deadline for Spring admission.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit official scores on the Graduate Record Examination (GRE) or MAT;
4. submit a current resume;
5. complete and submit a Professional Counseling Program supplemental application. This is available online at www.mtsu.edu/edu_leadership/professional_counseling/admission.php;
6. submit recommendation forms that are specific to the counseling program. These are available at www.mtsu.edu/edu_leadership/professional_counseling/admission.php. If possible, two of the recommendations should come from faculty who can attest to the applicant's academic abilities. The third can come from someone who has either supervised the applicant's work, has been a colleague, or has known him/her for at least three years (other than family).

Professional Counseling faculty will review all completed application files (all of the above), and if minimal requirements are met, will arrange with the applicant for participation in an admissions interview during the spring or fall semester. The admissions committee consists of Professional Counseling faculty members and at least one practicing mental health professional and school counselor.
Following the admissions interview, Professional Counseling faculty will make admissions decisions. The following are considered in the decision-making process:

1. input from regular, adjunct, and affiliate program faculty (if the applicant has taken or is currently taking classes);
2. input from practitioners who served on the admissions committee;
3. each applicant's potential success in forming effective interpersonal relationships in individual and small-group contexts;
4. each applicant's aptitude for graduate-level study, including technological competence and computer literacy;
5. each applicant's career goals and objectives and their relevance to the program;
6. each applicant's openness to self-examination and personal and professional self-development;
7. each applicant's openness to and respect for diversity in its many forms; and
8. each applicant's written acknowledgment that they reviewed the Professional Counseling handbook and the most current version of the American Counseling Association Code of Ethics prior to the interview day and agree to abide by the content of those documents-should they be admitted into the program-on the day of the interview.

Applicants will be formally notified of the admission decision by the College of Graduate Studies within 30 days of the admissions interview. If accepted into the Professional Counseling program, the applicant must within two weeks notify the program coordinator of his/her intention to enter the program.

Internship Grade and Professional Dispositions Policy

Successful completion of Clinical Mental Health Counseling internship entails earning a grade of B- of higher and rubric ratings of "Acceptable" and/or "Target" in all six professional dispositions categories (i.e., Collaborative, Ethical, Professional, Reflective, Self-Directed, and Critical Thinker). Successful completion of two semesters of internship is a requirement for the Ed.S. degree.
If a student earns less than a B- in their first or second semester of internship and/or if they receive an "Unacceptable" rubric score in one or more of the six professional disposition categories then they will be required to repeat and successfully complete a semester of internship. Students will be given the opportunity to repeat a semester of internship, if necessary, only once during their program.

Remediation will be required if a student must repeat a semester of internship. Targets of remediation will vary from student to student and will be determined by the faculty. Remediation procedures will be employed in accordance with the Professional Counseling Program Continuous Evaluation policy.

Degree Requirements

The Specialist in Education in Professional Counseling with a concentration in Clinical Mental Health Counseling requires completion of 61 semester hours.
Candidates must successfully complete the Counselor Preparation Comprehensive Examination (may be taken no more than twice).

Curriculum: Professional Counseling, Clinical Mental Health Counseling

The following illustrates the coursework requirements.

Prerequisites

- PSY 3230 - Abnormal Psychology with a minimum grade of B (or an equivalent undergraduate abnormal psychology course taken at another accredited educational institution)

Required Courses (61 hours)

- COUN 5655 - Foundations of Clinical Mental Health Counseling **3 credit hours**
- COUN 6110 - Introduction to Professional Counseling **3 credit hours**
- COUN 6150 - Career Counseling **3 credit hours**
- COUN 6170 - Group Counseling and Psychotherapy **3 credit hours**
- COUN 6180 - Laboratory in Group Counseling and Psychotherapy **1 credit hours**
- COUN 6210 - Multicultural Counseling **3 credit hours**
- COUN 6230 - Legal and Ethical Issues in Counseling **3 credit hours**
- COUN 6260 - Pre-Practicum in Counseling **3 credit hours**
- COUN 6270 - Practicum in Counseling **3 credit hours**
- COUN 6410 - Development Across the Lifespan **3 credit hours**
- COUN 6540 - Internship: Clinical Mental Health Counseling **3 or 6 credit hours** (two semesters, **6 credit hours**)
- COUN 6610 - Introduction to Counseling Research **3 credit hours**
- COUN 6750 - Foundations of Trauma and Crisis in Counseling **3 credit hours**
- COUN 6765 - Diagnosis and Treatment Planning in Counseling **3 credit hours**
- COUN 6810 - Adult Counseling **3 credit hours**
- COUN 6830 - Theories and Techniques of Counseling **3 credit hours**
- COUN 6840 - Measurement and Appraisal in Counseling **3 credit hours**
- COUN 6850 - Couples and Family Counseling: Assessment and Treatment **3 credit hours**
- COUN 6886 - Trauma-Focused Assessment and Treatment of Children and Adolescents **3 credit hours**
- COUN 7520 - Trauma-Informed Assessment and Treatment of Addictions **3 credit hours**

Program Notes

A 100-hour practicum and 600-hour internship in a mental health setting is required.

Professional Counseling, School Counseling Concentration, Ed.S.

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The Ed.S. in Professional Counseling offers concentrations in Clinical Mental Health Counseling and School Counseling. The School Counseling concentration is developmental with a prevention/intervention focus.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the School Counseling program is not automatic for students meeting minimum admission requirements. Admissions decisions for the School Counseling Program will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study in this area.
Successful applicants typically have demonstrated the following:

1. a 3.00 or higher undergraduate grade point average (If an applicant's GPA is lower than 3.00 then Professional Counseling faculty will consider applicant's academic performance during the last 60 hours of his or her undergraduate program);
2. a score of 146 or higher on the verbal section of the Graduate Record Exam (GRE) or 385 or higher on the Miller Analogies Test (MAT) for applicants whose overall undergraduate grade point averages are below 3.50. A graduate admissions test score is not required for applicants with overall undergraduate grade point averages of 3.50 or above (on a 4.00 scale).
3. three positive references on Professional Counseling recommendation form;
4. a written essay/statement of purpose on the supplemental application form in which the applicant's reason for pursuing a master's degree in Professional Counseling with a concentration in School Counseling is congruent with the focus/emphasis of the program;
5. resume that includes name, address, and phone number of applicant; school applicant attended and applicant's major, minor, and grade point average; honors and awards; and employment and volunteer experiences;
6. if invited, participate in a half-day interview within the first six (6) hours of coursework (invitation based on how the applicant compares to other applicants in relation to the other requirements). The interview is conducted by Professional Counseling faculty, a practicing mental health counselor, and school counselor. The interview is conducted by Professional Counseling faculty, a practicing mental health professional, and school counselor. An invited applicant must review the Professional Counseling handbook and the most current version of the American Counseling Association Code of Ethics prior to the interview day and agree in writing to abide by the contents of those documents-should they be admitted into the program-on the day of the interview. Applicant must receive a positive recommendation from the faculty and counselors for program admission.

Note: Meeting minimum requirements for program admission does not guarantee admission, as applicants are selected on a competitive basis.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application materials for Summer/Fall admission must be submitted by February 10; September 10 is the deadline for Spring admission.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.

2. submit official transcripts of all previous college work;
3. submit official scores on the Graduate Record Examination (GRE) or MAT;
4. submit a current resume;
5. complete and submit a Professional Counseling Program supplemental application. This is available online at www.mtsu.edu/edu_leadership/professional _counseling/admission.php.
6. submit recommendation forms that are specific to the counseling program. These are available online at www.mtsu.edu/edu_leadership/professional _counseling/admission.php. If possible, two of the recommendations should come from faculty who can attest to the applicant's academic abilities. The third can come from someone who has **either** supervised the applicant's work, has been a colleague, or has known him/her for at least three years (other than family).

Professional Counseling faculty will review all completed application files (all of the above) and, if minimal requirements are met, will arrange with the applicant for participation in an admissions interview during the spring or fall semester. The admissions committee consists of Professional Counseling faculty members and at least one practicing mental health professional and one school counselor.

Following the admissions interview, Professional Counseling faculty will make admissions decisions. The following are considered in the decision-making process:

1. input from regular, adjunct, and affiliate program faculty (if the applicant has taken or is currently taking classes);
2. input from practitioners who served on the admissions committee;
3. each applicant's potential success in forming effective interpersonal relationships in individual and small-group contexts;
4. each applicant's aptitude for graduate-level study, including technological competence and computer literacy;
5. each applicant's career goals and objectives and their relevance to the program;
6. each applicant's openness to self-examination and personal and professional self-development;
7. each applicant's openness to and respect for diversity in its many forms; and
8. each applicant's written acknowledgment that they reviewed the Professional Counseling handbook and the most current version of the American Counseling Association Code of Ethics prior to the interview day and agree to abide by the contents of those documents-should they be admitted into the program-on the day of the interview.

Applicants will be formally notified of the admission decision by the College of Graduate Studies within 30 days of the admissions interview.

If accepted into the Professional Counseling program, the applicant must within two weeks notify the program coordinator of his/her intention to enter the program.

Degree Requirements

The Specialist in Education in Professional Counseling with a concentration in School Counseling requires completion of 61 semester hours. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours.

Candidates must successfully complete the Counselor Preparation Comprehensive Examination (may be taken no more than twice).

Curriculum: Professional Counseling, School Counseling

The following illustrates the coursework requirements.

Prerequisite

- PSY 3230 - Abnormal Psychology **3 credit hours**

Major Requirements (61 hours)

- COUN 6110 - Introduction to Professional Counseling **3 credit hours**
- COUN 6120 - Counseling Exceptional Children **3 credit hours**
- COUN 6150 - Career Counseling **3 credit hours**
- COUN 6160 - Foundations of School Counseling **3 credit hours**
- COUN 6165 - Advanced School Counseling **3 credit hours**
- COUN 6170 - Group Counseling and Psychotherapy **3 credit hours**
- COUN 6180 - Laboratory in Group Counseling and Psychotherapy **1 credit hours**
- COUN 6210 - Multicultural Counseling **3 credit hours**
- COUN 6230 - Legal and Ethical Issues in Counseling **3 credit hours**
- COUN 6260 - Pre-Practicum in Counseling **3 credit hours**
- COUN 6270 - Practicum in Counseling **3 credit hours**
- COUN 6410 - Development Across the Lifespan **3 credit hours**
- COUN 6610 - Introduction to Counseling Research **3 credit hours**
- COUN 6750 - Foundations of Trauma and Crisis in Counseling **3 credit hours**
- COUN 6765 - Diagnosis and Treatment Planning in Counseling **3 credit hours**
- COUN 6830 - Theories and Techniques of Counseling **3 credit hours**
- COUN 6840 - Measurement and Appraisal in Counseling **3 credit hours**
- COUN 6886 - Trauma-Focused Assessment and Treatment of Children and Adolescents **3 credit hours**
- COUN 6940 - Internship: School Counseling **3 to 6 credit hours (6 credit hours required)**

  Choose one of the following in consultation with advisor:
- COUN 6540 - Internship: Clinical Mental Health Counseling **3 or 6 credit hours**
- COUN 6850 - Couples and Family Counseling: Assessment and Treatment **3 credit hours**
- COUN 7520 - Trauma-Informed Assessment and Treatment of Addictions **3 credit hours**

Program Notes

Students are required to complete a 100-hour practicum and two 300-hour internships in elementary and high school settings. An additional 40 hours of school experience for persons not licensed to teach are also required. Students seeking Tennessee school counseling licensure must obtain a positive recommendation from the professional counseling faculty at the end of their programs. Coursework completion is not a guarantee of the recommendation for licensure.

School Counseling Candidates Seeking Tennessee School Counseling Licensure

All candidates seeking licensure as a school counselor in Tennessee must take and pass the Praxis Test: Instructional Support Personnel, Professional School Counselor (per State Department of Education criteria). This test is taken when the student is near the end of the master's program.
Students who hold a graduate degree in an area other than school counseling who seek to take classes to obtain licensure as a school counselor in Tennessee must be accepted into the School Counseling program in order to do

so. This admission is not automatic. Successful applicants will generally meet the same criteria as other School Counseling program applicants, as described above.
These applicants should take the following steps:

1. consult with the School Counseling program coordinator regarding what additional coursework is needed for licensure;
2. apply to the College of Graduate Studies under the category of "Addition of School Counseling License to Previous Master's";
3. submit all application materials, as described in Application Procedures, to the College of Graduate Studies;
4. attend the half-day interview if invited to do so.

Internship Grade and Professional Dispositions Policy

Successful completion of School Counseling internship (COUN 6920 and COUN 6930) entails earning a grade of B- or higher and rubric ratings of "Acceptable" and/or "Target" in all six professional dispositions categories (i.e., Collaborative, Ethical, Professional, Reflective, Self-Directed and Critical Thinker). Successful completion of two semesters of internship is a requirement for the Ed.S. degree.
If a student earns less than a B- in their first or second semester of internship and/or if they receive an "Unacceptable" rubric score in one or more of the six professional dispositions categories then they will be required to repeat and successfully complete a semester of internship. Students will be give the opportunity to repeat a semester of internship, if necessary, only once during their program.
Remediation will be required if a student must repeat a semester of internship. Targets of remediation will vary from student to student and will be determined by the faculty. Remediation procedures will be employed in accordance with the Professional Counseling Program Continuous Evaluation policy.

United States Culture and Education Certificate

Vacant, Program Director
This interdisciplinary certificate program offered through the Womack Educational Leadership Department has as its central goal to provide international students an opportunity to complete a short-term academic program of study that allows them to gain an understanding of American culture and to benefit from the opportunity to take courses in their area of interest at a leading U.S. university.

Admission Requirements

Admission to the United States Culture and Education certificate program requires

1. the student to be an international student who has met the English-language proficiency requirements of the University;
2. an earned bachelor's degree;
3. an acceptable grade point average in all college work taken.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.

Certificate Requirements

Once admitted to the program, candidate must

1. meet all of the retention and graduation requirements of the College of Graduate Studies at MTSU;
2. complete 12 hours of graduate courses (see Curriculum section below for specifics);
3. maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate.

Curriculum: United States Culture and Education

Candidate must complete 12 hours in the following course of study:

Major Field Course (3 hours)

- FOED 5500 - Understanding U.S. Culture and Education **3 credit hours**

Electives (9 hours)

Students enrolled in the certificate program may select elective courses in their field of study or courses that meet their needs/interests from any department or program, subject to normal program and course restrictions (e.g., prerequisites). Emphasis will be on selection of courses that meet the academic degree requirements or interests of the international student.

Program Notes

The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.

Counseling

COUN 5201 - Directed Public School Experience for Non-teachers
3 credit hours Prerequisite: Permission of department. Open only to School Counseling students or applicants. Includes 40 hours of observation and participation in a public elementary school with directed assignments for School Counseling students who have no teaching experience. Background check required before participation.

COUN 5655 - Foundations of Clinical Mental Health Counseling
3 credit hours Prerequisite: COUN 6110. History, roles, and duties of the professional clinical mental health counselor. Managed care and third party reimbursement issues, administration and supervision of mental health services, and other salient issues relating to the role of the professional clinical mental health counselor.

COUN 6110 - Introduction to Professional Counseling
3 credit hours An introductory study of the counseling profession. Basic educational, historical, philosophical and psychological foundations of counseling as well as specific traits and skills of professional counselors. Beginning level concepts and skills required for certification and licensure.

COUN 6120 - Counseling Exceptional Children
3 credit hours Examines the assessment and placement needs of exceptional children in the school setting and explores the strategies for counseling and guidance. Emphasis will be placed on lifespan, diversity, and ethical issues for professional school counselors.

COUN 6150 - Career Counseling
3 credit hours Prerequisites: COUN 6110 and COUN 6230 or permission of department. History, theory, and issues related to career development, career choice, and career education. Demonstration of the ability to teach career information seeking behavior and decision-making skills.

COUN 6160 - Foundations of School Counseling
3 credit hours Prerequisite: COUN 6110. History, foundations, philosophy, and principles of developmental school counseling; roles and functions of school counselors, including professional and personal requirements.

COUN 6165 - Advanced School Counseling
3 credit hours Prerequisite: COUN 6160; permission of department. Utilizes data to create and maintain a comprehensive and data-driven school counseling program within the K-12 educational system. Emphasis on the American School Counseling Association (ASCA) National Model, the ASCA Professional Competencies, and the ASCA Ethical Standards.

COUN 6170 - Group Counseling and Psychotherapy
3 credit hours Prerequisites: COUN 6830, COUN 6260, or permission of instructor. Corequisite: COUN 6180. Group process, ethics, and techniques. Application of counseling theory, group procedures, sociometrics, and group dynamics to interpersonal relations, mental health, school, and industrial settings. Supervised experience. Liability insurance required prior to enrollment.

COUN 6180 - Laboratory in Group Counseling and Psychotherapy
1 credit hours Corequisite: COUN 6170. Students will experience group processes as members of a growth group during the first half of the semester and will demonstrate group skills as leaders of group session(s) during the second half of the semester.

COUN 6210 - Multicultural Counseling
3 credit hours A theoretical and skill development course related to the field of Professional Counseling. Information provided to strengthen multicultural awareness, knowledge, and skills in the competencies necessary to create helping relationships with ethnically and culturally diverse clients.

COUN 6220 - Organization and Administration of School Counseling Services
3 credit hours Prerequisite: COUN 6160. Organizing, administering, and managing the various components of a developmental school guidance and counseling program.

COUN 6230 - Legal and Ethical Issues in Counseling
3 credit hours Prerequisite: COUN 6110. Legal, ethical, and professional issues pertaining to the practice of school and mental health counseling.

COUN 6260 - Pre-Practicum in Counseling
3 credit hours Prerequisite: COUN 6110 or permission of instructor. Introduces basic communication skills, techniques, and process involved in working with clients in a counseling relationship; extensive role-play practice with peer and faculty feedback. Liability insurance required prior to enrollment.

COUN 6270 - Practicum in Counseling
3 credit hours Prerequisites: COUN 6170, COUN 6180, COUN 6230, COUN 6260, COUN 6830; permission of instructor. Practical supervised experience in individual and group counseling in a school setting and MTSU Psychological Services Center; audio and/or video taping of sessions for peer and faculty feedback.

COUN 6410 - Development Across the Lifespan
3 credit hours Theories and characteristics of human development covering the lifespan.

COUN 6520 - Psychopharmacology
3 credit hours Biochemical, neurophysiological, and neuroanatomical basis; emphasis on drugs used in investigating and treating psychological disorders.

COUN 6540 - Internship: Clinical Mental Health Counseling
3 or 6 credit hours Prerequisites: COUN 6270 and permission of the Professional Counseling faculty. Supervised internship in a clinical/agency setting with a minimum of 40 percent direct service (i.e., counseling and related activities) hours. May be repeated; enrollment must be continuous.

COUN 6610 - Introduction to Counseling Research
3 credit hours Prerequisite: An undergraduate statistics course. Common methods used by researchers and practitioners to answer questions pertaining to counseling-related phenomena including quantitative and qualitative methods, action research, needs assessment and program evaluation.

COUN 6750 - Foundations of Trauma and Crisis in Counseling
3 credit hours Prerequisite: COUN 6110. Prevalence of different types and diagnostic criteria for trauma across populations, the fundamental aspects of trauma-informed care as a best practice philosophy to counseling and service provision, and the roles and responsibilities of professional counselors in relation to crisis and crisis management.

COUN 6765 - Diagnosis and Treatment Planning in Counseling
3 credit hours Prerequisites: An undergraduate course in abnormal psychology; COUN 6110 and COUN 6830. Development of skills in the diagnosis and treatment of select mental disorders across the lifespan. Treatment planning strategies using evidence-based treatment interventions.

COUN 6800 - Adult Topics in Counseling
3 credit hours Overview of salient issues in the counseling profession related to working with adult clients. Introduction to topics such as spirituality, intimate partner violence, gerontological counseling and working with couples in counseling. Other topics may be added as relevant issues emerge in counseling literature.

COUN 6810 - Adult Counseling
3 credit hours Prerequisites: COUN 6110, COUN 6260, and COUN 6830. Analysis of common issues encountered when counseling adults. Development of case conceptualization, treatment planning, and counseling intervention skills. Examines counseling as a process.

COUN 6820 - Family Therapy: Evaluation and Treatment Planning
3 credit hours Examines evaluation and intervention procedures of major models of family therapy. Emphasis on ethical issues for practitioners of family therapy.

COUN 6830 - Theories and Techniques of Counseling
3 credit hours Survey of leading counseling theories, including applications of theories to case studies. Demonstration and practice of specific techniques.

COUN 6840 - Measurement and Appraisal in Counseling
3 credit hours Individual and group approaches to measurement and appraisal in counseling. Psychometric properties of tests and how to select, administer, and/or interpret aptitude, achievement, intelligence, personality, performance, and interest tests for use in counseling-related activities.

COUN 6850 - Couples and Family Counseling: Assessment and Treatment
3 credit hours Prerequisites: COUN 6110, COUN 6260, and COUN 6830. Examines major models and techniques of couples and family counseling.

Emphasis on assessment, treatment, and treatment planning as well as lifespan, diversity, trauma, and ethical issues for practitioners of couples and family counseling.

COUN 6885 - Play Therapy: Theory and Practice
3 credit hours Prerequisites: Permission of instructor and COUN 6260. Covers theory and techniques of play therapy useful to both the school counselor and school psychologist and to the practitioner in community practice. Includes a practicum experience using play therapy with young children in play therapy lab. Liability insurance required prior to enrollment.

COUN 6886 - Trauma-Focused Assessment and Treatment of Children and Adolescents
3 credit hours Prerequisites: COUN 6110, COUN 6260, and COUN 6830. Examines theories and techniques pertaining to child and adolescent counseling with an emphasis on the impact of traumatic events on children and adolescents' cognitive, neurobiological, and psychological development.

COUN 6890 - Consultation
3 credit hours Prerequisite: COUN 6270 and permission of instructor. Course must be taken prior to or concurrent with the first internship (COUN 6920 or COUN 6930). Theory and practice of consultation as a useful technique in the helping professions. Applied experiences in schools and other settings. Liability insurance required prior to enrollment.

COUN 6900 - Assessment of School Counseling Area Licensing Competencies
1 to 2 credit hours For the advanced student who by exceptional prior training or experience believes coursework for competence mastery is unnecessary in one or more of the licensing areas. All credit earned may be applied to a Master of Education degree in Professional Counseling. May be repeated ten times.

COUN 6910 - Independent Research: Counseling
1 to 9 credit hours Prerequisite: Permission of instructor. Individualized empirical research and library research approved by the instructor.

COUN 6920 - Internship: Secondary School Counseling
1 to 6 credit hours Prerequisite: COUN 6270. Actual experience in the counseling, consulting, coordinating services to adolescents, teachers, and parents. Requires 300 hours in the schools, with at least 40 percent in direct service. Liability insurance required prior to enrollment.

COUN 6930 - Internship: Elementary School Counseling
1 to 6 credit hours Prerequisite: COUN 6270. Actual experience in the school providing counseling, consulting, coordinating services to children, teachers, and parents. Requires 300 hours in the schools, with at least 40 percent in direct service. Liability insurance required prior to enrollment.

COUN 6940 - Internship: School Counseling
3 to 6 credit hours Prerequisites: COUN 6270 with B- or better and permission of the Professional Counseling faculty. Supervised internship in a school setting with a minimum of 40 percent direct service (i.e., counseling and related activities) hours.

COUN 6990 - Special Topics: Private Practice for Mental Health Professionals
3 credit hours Prerequisite: Permission of department. Identifies the components of successful private mental health practices and offers preparation for students to start and operate such practices.

COUN 7520 - Trauma-Informed Assessment and Treatment of Addictions
3 credit hours Prerequisite: COUN 6110. An introductory study of the etiology and treatment of addictive behaviors. Theories linked with addiction to biological, psychological, and other factors will be evaluated critically with an emphasis on the understanding the impact of trauma on addictive behaviors. Clinical models (e.g., developmental, solution-focused, biopsychosocial, motivational interviewing, stages of change, self-help) reviewed.

Foundations of Education

FOED 5500 - Understanding U.S. Culture and Education
3 credit hours Serves as an introduction to U.S. culture and higher education in the U.S. for international students. Emphasis on various topics that beginning students new to the U.S. need to know in order to be successful in academic, research, or business programs in the U.S.

FOED 6020 - Educational Foundations
3 credit hours Assists educational personnel in developing contexts and concepts in which educational problems and issues may be understood

through awareness of findings in humanistic and behavioral studies.

FOED 6022 - Foundations, History, and Legal Aspects of ESL and Bilingual Education
3 credit hours Emphasizes the impact of history of education in terms of legislation and education initiatives which target and address the needs of second language learners in public school classrooms.

FOED 6030 - School and Community Relations
3 credit hours The reciprocal relationship of the two and the skills necessary for analyzing problems and utilizing data and technical skills in planning effective school-community relations programs.

FOED 6211 - Educational Psychology for Classroom Teachers
3 credit hours Examination of physical, social, emotional, and mental development of humans from birth to maturity. Basic theories of learning including behaviorism, constructivism, and humanism plus theories of motivating and facilitating learning processes in classroom settings.

FOED 6519 - Measurement and Assessment in Higher Education
3 credit hours Offers preparation to create, use, and interpret various testing and measurement instruments found in higher education, with a focus on assessment as a part of the teaching-learning process and the use of assessments for instructional improvement.

FOED 6520 - Evaluation in Higher Education
3 credit hours Introduction to testing theory, design, and construction. Use of the evaluation process and instruments; instructions, advising, and research situations.

FOED 6570 - Issues in Higher Education
3 credit hours Higher education in America and its historical, philosophical, political, and sociological background, development, and relationships. Current trends and problems, particularly those relating to the financial and legal aspects.

FOED 6571 - The Ethics of Higher Education
3 credit hours Examines the ethical issues facing higher education (national, regional, and state) and what may be the appropriate solutions. Attention is given to the interrelationships of the institution and its internal and external constituencies.

FOED 6580 - The College Student
3 credit hours The changing nature of the college student with emphasis on institutional efforts to provide for the development of the student.

FOED 6610 - Analysis and Application of Educational Research
3 credit hours Qualitative and quantitative research applicable to the field of education. Both producers and consumers of educational research with a literature review presented to support possible solutions to significant hypotheses or problems.

FOED 6620 - Action Research for Practitioner-Based Learning Environments
3 credit hours Examination of action research processes as related and applied to practitioner-required and work-based settings. Design and implementation of an IRB-approved action research study related to a selected learning environment.

FOED 6630 - Educational Tests and Measurements
3 credit hours Basic concepts in educational measurement and evaluation; evaluation as a part of the teaching-learning process; utilization of evaluation for instructional improvement.

FOED 6850 - Cultural Issues in Education
3 credit hours Explores our unique American multiculture and fosters exploration of teaching for diversity while promoting unity. Explores basic components of multicultural education and aids educators in developing awareness, understanding, and sensitivity to the needs and interests of ethnic and cultural groups.

FOED 6860 - Education and Digital Youth: Language Learning in a Participatory Culture
3 credit hours Examines the impact of digital media and the current school-aged population of English language learners. Emphasis on language learning and instruction using a variety of online media, developing multiple literacies, and designing appropriate language and content instruction using appropriate web tools.

FOED 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

FOED 7060 - Seminar in Educational Foundations
3 credit hours Opportunities to think reflectively and critically on the historical, philosophical, and psychological foundations of education and attendant implications.

FOED 7080 - Contributions of Psychology to Education
3 credit hours Concepts and generalizations of the various theories of psychology and their relationships to education in such areas as motivation, retention, evaluation, discipline, capacity, practice, understanding, transfer-creative thinking, problem solving, and methods of instruction.

FOED 7519 - Measurement and Assessment in Higher Education
3 credit hours Offers preparation to create, use, and interpret various testing and measurement instruments found in higher education, with a focus on assessment as a part of the teaching-learning process and the use of assessments for instructional improvement.

FOED 7520 - Evaluation in Higher Education
3 credit hours Introduction to testing theory, design, and construction. Use of the evaluation process and instruments; instructions, advising, and research situations.

FOED 7560 - Seminar in College Teaching
3 credit hours Development of the student with focus on teaching and learning.

FOED 7570 - Issues in Higher Education
3 credit hours Higher education in America and its historical, philosophical, political, and sociological background, development, and relationships. Current trends and problems, particularly those relating to the financial and legal aspects.

FOED 7571 - The Ethics of Higher Education
3 credit hours Examines the ethical issues facing higher education (national, regional, and state) and what may be the appropriate solutions. Attention is given to the interrelationships of the institution and its internal and external constituencies.

FOED 7580 - The College Student
3 credit hours The changing nature of the college student with emphasis on institutional efforts to provide for the development of the student.

FOED 7610 - Directed Individual Educational Research
3 credit hours Prerequisite: SPSE 7010. It is recommended that this class be taken the semester following enrollment in SPSE 7010. Culmination of research sequence (FOED 6610 and SPSE 7010) which requires studying a professional educational problem through completing and presenting a research project.

FOED 7611 - Research Internship
1 to 3 credit hours Prerequisite: FOED 7610 and SPSE 7010. Must be taken each semester (not including summer) until research is completed. Completion of the research problem begun in FOED 7610. Students should continue to register for FOED 7611 each semester until completion. S/U grading.

FOED 7640 - Ed.S. Thesis Research
1 to 6 credit hours

FOED 7999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Library Science

LIBS 6000 - Librarianship
3 credit hours Presents the broad field of librarianship as a profession. Book and library history, the place of the library as an essential resource for communities, and the role of the librarian in provision of service to all users. The e-portfolio will be planned and designed.

LIBS 6015 - Introduction to Information Intermediation, Resources, and Instruction
3 credit hours Evaluation and use of print and electronic reference materials, programming for literacy skills, the reference selection process, emerging technologies for reference, and initial development of search strategies.

LIBS 6020 - Organization of Information
3 credit hours Introduces students to the concepts and theoretical foundations of organizing information with an emphasis on organizing library resources.

LIBS 6030 - Information Technology for Information Professionals
3 credit hours Presents basic information technology concepts and skills necessary for library and information science professionals.

LIBS 6060 - Understanding Research for Evaluation in Libraries
3 credit hours Core course in M.L.S. program. Studies of research methods, qualitative and quantitative research, and statistical analysis to achieve decision-making skills based on research results. Emphasis on practitioner skills to evaluate processes, products, and services of libraries. Final project based on a local library and presented to the library at end of the course.

LIBS 6100 - Management of Libraries
3 credit hours Prerequisites: 6 credit hours of LIBS 6000-level courses. Administration and management of the library. Trends, governance, information literacy issues, and all other elements of managing the modern library addressed.

LIBS 6105 - School Library Management
3 credit hours Prerequisite: 6 credit hours of LIBS 6000-level courses. Encompasses the administration and supervision of the modern library and its program. Goals are based on ALA and/or AASL standards and initiates exploration of library improvement and instruction for learning.

LIBS 6115 - Collection Development and User Services
3 credit hours Study of library collections and their relationship to user services. Includes study of the evolution of library collections, the development of information needs, analysis of stakeholder needs, library mission, collection analysis, selection aids, and collection maintenance. Field visits required.

LIBS 6201 - Public Libraries
3 credit hours Prerequisite: LIBS 6000. Covers the public library's role in society including current practices, trends, and issues. Topics include history of public libraries, governance, funding, equity and access, youth and adult services, facilities, technology, outreach, and global perspectives.

LIBS 6310 - Materials for Literacy of Children
3 credit hours Materials suitable for babies, toddlers, and elementary school children. Includes study of reading skills, recreational reading, non-fiction, criteria for evaluating, selecting, and integrating national standards into programming for these patrons. The partnership between library and school curriculum will be included.

LIBS 6311 - Materials for Literacy of Young People and Adults
3 credit hours Materials suitable for young adults and adults, including recreational reading; non-fiction; criteria for evaluating, selecting, integrating current standards of library service into programming for these patrons.

LIBS 6312 - Government Information Sources
3 credit hours Selection, acquisition, organization, and utilization of government information in a variety of formats from legislative, judicial and executive branches of federal, state, and local governments.

LIBS 6320 - Information Searching Strategies
3 credit hours Prerequisite: 6 credit hours of LIBS 6000-level courses. Study of user behaviors will provide the foundation for identifying productive search strategies. Includes information security, study of search engine features and design, and application of information studies to design instruction that fosters efficient and effective searches.

LIBS 6330 - Digital Library Collections
3 credit hours Prerequisite: 6 credit hours of LIBS 6000-level courses. Provides a theoretical framework for the digitization of materials. Explores user needs, issues, and trends related to digital collections.

LIBS 6331 - Library Systems and Automation
3 credit hours Prerequisite: LIBS 6030. Introduces students to the functionality of Integrated Library Systems and how to evaluate them for the best fit for satisfying the library's needs.

LIBS 6340 - Integration of Learning Theory, Programs, and Technology
3 credit hours Discusses and examines technology-based materials and adaptation to library literacies instruction and individual learning styles/needs. Design, creation, and production of technology-based materials that reflect professional standards, good online design principles, understanding of instructional design, and audience needs.

LIBS 6345 - Instructional Strategies for Information Professional
3 credit hours Prerequisite: LIBS 6015. Theory, strategy, design, and practice in providing instructional services and technology for end users of information and information systems. Includes application of information literacy standards and assessment methods.

LIBS 6401 - Academic Libraries
3 credit hours Prerequisite: LIBS 6000. Provides a broad overview of academic libraries. Examines the purpose of the academic library in light of the type of institution it serves; introduces the mission of academic libraries in universities and colleges as well as examines the necessary services, resources, space, and funding needed to fulfill that mission.

LIBS 6511 - Directed Student Teaching (Library Science)
9 credit hours Prerequisites: All required Library Science courses; FOED 6610; must meet all requirements for admission to teacher education. A full-time, full semester of supervised teaching experience in a public school library. Provides an opportunity to observe successful materials specialists/librarians at work and to participate in actual operations followed by seminar opportunities for exchange of ideas.

LIBS 6550 - Supervised Field Experience in Library Science
3 to 6 credit hours Prerequisite: 12 credit hours of LIBS courses. Provides direct field experience in a library with practicing materials specialists/librarians at work. Students participate in actual library operations. Planning and implementing programs based on ALA standards mandatory. Seminar opportunities provided for discussion and reflection. May be repeated up to a maximum of 6 credit hours.

LIBS 6620 - Library Services for Special Populations
3 credit hours Prerequisite: LIBS 6000. Designed to prepare information professionals to develop and provide inclusive services to underrepresented populations, and to analyze and evaluate services to ensure equality of access to information in a range of institutional settings.

LIBS 6820 - Advanced Metadata Management of Library Resources
3 credit hours Prerequisite: LIBS 6020. Covers rules and encoding for description and access points as presented in the Anglo-American Cataloguing Rules (AACR) Rules for Description and Access (RDA) and MARC for describing resources held typically in libraries. Students will create descriptions of manifestations of works such as monographs, serials, sound and video recordings, realia, computer files, maps, websites, etc., all in computer-based encoding programs (OCLC Connexion).

LIBS 6900 - Skills and Issues in the Library
3 credit hours Prerequisite: LIBS 6100 or LIBS 6105. Final preparation of ePortfolio. In depth examination and practice of all aspects of the library. Students must provide evidence of program goals during the semester. Innovative research into current issues, strategic planning, and advocacy is expected. Restricted to final two semesters.

LIBS 6970 - Web Based Tools and Curriculum
3 credit hours (Same as SPSE 7970.)
Prerequisite: LIBS 6340 or SPSE 6960. Synthesis of design, creation, and production of instructional curriculum integrating Internet and technology-based tools throughout. Includes analysis and reflection on the curriculum created. Mentor project is completed during the semester.

LIBS 6999 - Exit Assessment Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will submit the required exit assessment during the term. The student must contact the graduate advisor at least two weeks prior to the term for specifics regarding the details of this course. Credit may not be applied to degree requirements. Pass/Fail.

School Personnel Service Education

SPSE 5260 - Problems in Education
1 to 3 credit hours Opportunity for individuals or groups to work on problems related to their individual topics. Credit to be determined at the time of scheduling.

SPSE 6005 - Student Affairs in Higher Education
3 credit hours Provides an overview of student affairs in higher education. Covers the history and development of student affairs, structure and organization of student affairs divisions, and introduces the profession with an understanding of the expectations and ethics of the field.

SPSE 6007 - Student Success in Higher Education
3 credit hours Overview of student success in higher education. Covers the enhancement of student success through professional learning communities, cultural change, collaboration, and the utilization of data analytics to drive decision-making for student success in higher education leadership.

SPSE 6010 - Organization and Administration of Public Schools
3 credit hours Basic concepts, principles, and practices in local, state, and federal organization and administration of education.

SPSE 6040 - Supervision of Instruction
3 credit hours Development and purposes of supervision involving principles and techniques for organization and facilitation of programs at the school and system level.

SPSE 6050 - Instructional Leadership
3 credit hours Research on student learning, effective teaching, and effective schools. Attention given to processes for promoting school improvement.

SPSE 6080 - Studies in Leadership
3 credit hours Roles, responsibilities understandings, and behavior patterns in effective administrative and supervisory personnel. Developing sensitivity to individuals, the nature and structures of groups, and the problems of communication within and among groups and individuals.

SPSE 6090 - Seminar: Conducting Program for School Improvement
3 credit hours Emphasizes motivation, identification of needs and goals, planning and organization, and utilization of various resources as components of successful school improvement programs.

SPSE 6120 - Professional Internship
9 credit hours Requires approval of departmental chair and agreement of superintendent of the school district. May be substituted for SPSE 6040, SPSE 6600, and SPSE 6400. Educational administration and supervision experiences learned in the school setting under the supervision of a sponsoring mentor. Internship in cooperating school systems.

SPSE 6140 - Teacher Leadership for School Improvement
3 credit hours Assessing standard teaching practices, analyzing the relationship between effective teaching and effective schools, and developing strategies for instructional and school improvement. Includes experiences to help students become more reflective in their daily teaching.

SPSE 6210 - Legal Issues in Higher Education
3 credit hours The legal framework as it pertains to higher education and its operations. Special attention given to rights of students as well as professors. Law cases, constitutional provisions, attorney general's opinions, rules and regulations of the Tennessee Board of Regents, Tennessee Board of Trustees, and the Tennessee Higher Education Commission studied and discussed.

SPSE 6250 - Seminar in Curriculum Improvement
3 credit hours For the advanced major in curriculum development utilizing small group or seminar approach. Issues and research in curriculum improvement analyzed critically.

SPSE 6340 - School Finance
3 credit hours State, local, and federal financing of education; includes taxation trends, school funds, and apportionment; evaluation of equalization plans; state bond loan programs; development and administration of school budgets; education and economy.

SPSE 6390 - School Law
3 credit hours Legal framework within which public schools operate. Special attention given to the legal rights and liabilities of school personnel and school board members. School laws, case laws,

constitutional provisions, attorneys' general rulings, and regulations of the State Board of Education emphasized.

SPSE 6400 - The Principalship
3 credit hours Organization and administration of the modern K-12 school with emphasis on current practices and problems.

SPSE 6430 - Introduction to Curriculum Development
3 credit hours Opportunity to study, discuss, and evaluate modern practices and procedures in curriculum development and reorganization in schools and school systems.

SPSE 6450 - Elementary and Middle School Curriculum
3 credit hours Concepts, processes, and skills related to curriculum development and evaluation.

SPSE 6480 - Instructional Excellence in Secondary Schools
3 credit hours Development of creative approaches for secondary classroom teaching in order to stimulate creative and critical thinking abilities of students.

SPSE 6500 - Studies in Education: Administration
1 to 3 credit hours Individual or small group study and/or research in educational administration which provides an opportunity for in-depth study and specialization for majors. To be structured for student needs by teacher. Repeatable up to six hours.

SPSE 6520 - Studies in Education: Curriculum
1 to 3 credit hours Individual or small group study and/or research in the area of curriculum development. To be structured for student needs by teacher. Repeatable up to six hours.

SPSE 6530 - Administration of Higher Education
3 credit hours Complexity of the structure of higher education (national, regional, state, and local) and how it is organized. Attention given to the interrelationships of the institution and its internal and external constituencies.

SPSE 6540 - Overview of Higher Education
3 credit hours Higher education in America. Attention given to its historical, philosophical, political, and sociological background, development, and relationships. Includes current trends and problems, particularly those which relate to the financial and legal aspects of higher education.

SPSE 6550 - Supervised Field Experience
3 or 6 credit hours Designed to provide direct field experience in appropriate areas of school operation which will meet specific needs related to such individual matters as career plans, position changes (principals, supervisors, superintendent, curriculum directors, librarians, etc.), or needed competencies. May be repeated up to a maximum of six hours.

SPSE 6551 - Instructional Development in Higher Education
3 credit hours Prerequisite: Previous college teaching (instructor of record) or completion of the LT&ITC graduate teaching assistant teaching preparation certification program or approval of the instructor. Addresses effective course design, instructional strategies, and use of technology in teaching at the higher education level.

SPSE 6560 - Studies in Education: Supervision
1 to 3 credit hours Individual or small group study and/or research in the area of supervision of instruction. To be based on individual needs and structured by teacher. Repeatable up to six hours.

SPSE 6590 - Independent Study in Higher Education
1 to 3 credit hours A practicum in higher education. Course will vary to meet the needs of individual students who are interested in making a specialized study of current problems in the field of higher education.

SPSE 6600 - Microcomputers in Educational Administration
3 credit hours Offers preparation for incorporating microcomputer technology into the school work-place. Student designs a model school administrative unit by applying the microcomputer skills and understanding acquired.

SPSE 6640 - Digital Learning in the K-12 Educational Setting
3 credit hours Offers preparation for incorporating 21st century digital learning into the K-12 school environment for the purpose of inspiring students to positively contribute to and responsibility participate in the digital world. Students will design digital learner-driven activities that accommodate diverse students.

SPSE 6712 - Fieldwork and Professional Collaboration in ESL Classrooms
3 credit hours Prerequisite: YOED 6020. A field-based course for English as a Second Language teachers. Examines issues, professionalism, and challenges for working with ELs in public school classrooms. Emphasis on professional collaboration with mentors, community members, and ethnographic practices as a means for building advocacy and improving classroom situations for ELs.

SPSE 6715 - Applied Research and Practice in Teaching English as an International Language
3 credit hours Prerequisite: YOED 6030 or permission of department. Provides opportunities for examination of current research, principles, and effective practices in teaching English as an International Language (EIL). Examines specific EIL methods, strategies, and techniques appropriate for teaching EIL in a variety of learning settings. Content and course activities include the development and implementation of standards-based lessons and application of methods for teaching EIL. Applied research and fieldwork in an EIL setting required. Fieldwork required.

SPSE 6800 - Curriculum Design and Instruction for ELs
3 credit hours Analysis of curriculum models for instruction in the EL classroom. Considers elements of differentiated instruction, transformative literacy frameworks, and standards-based content in lesson planning, embedded assessment tasks, and units plans with appropriate accommodations and adjustments for second language learners. Fieldwork required.

SPSE 6810 - Grammar for the ESL Classroom
3 credit hours Examines the constructs of the English grammar system. Explores grammatical metalanguage, lexicon, approaches to teaching grammar and language, and classroom applications for ESL classrooms. Presents information regarding the grammatical form and meaning as related to teaching and learning for second language learners in the K-12 environment.

SPSE 6820 - Second Language Acquisition: Language, Culture, Theory, Practice
3 credit hours Focus on specific theories and research pertaining to second language acquisition for the PreK-12 EL and regular education classroom teacher. Emphasis on cultural aspects that influence language acquisition, elements of language, sound systems, cognitive processes, and the psychology of language learning. Required for add-on endorsement in ESL.

SPSE 6830 - Assessment and Evaluation of English Language Learners
3 credit hours Examines the role of assessment in the education of linguistically diverse students in the PreK-12 classroom. Focus on formal and informal methods of assessing language proficiency, state and national testing initiatives, test preparation, and interpretation of test results. Fieldwork required.

SPSE 6900 - Online Learning and Instructional Design
3 credit hours Assessment of effectiveness and efficiency of various learning systems and learning modules. Stresses need for systematic approaches to instruction. Practice in stating behavioral objectives, motivation, adaptation, evaluation, and systems assessment in which media are utilized as integral parts of learning modules.

SPSE 6905 - Online Course Development for Higher Education
3 credit hours Prerequisite: SPSE 6551 or SPSE 7551 or permission of instructor. Evaluation and application of best practices in online instructional design. Includes a broad overview of instructional design history, theories, and current trends. Applies the principles of online learning and integration of instructional technologies to promote effective online instruction.

SPSE 6960 - Integration of Learning Theory, Curriculum, and Technology
3 credit hours (Same as LIBS 6340.) Discussion and examination of technology-based learning materials and adaptation to classroom instruction and individual learning styles/needs. Design, creation, and production of technology-based learning materials that reflect professional standards, good design principles, understanding of curriculum design, and audience needs.

SPSE 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for

specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

SPSE 7001 - College Teaching Practicum
3 credit hours Allows students to gain experience teaching a college-level course within the student's area of specialization under the direct supervision of a faculty member; creation of a professional portfolio which showcases materials the student created.

SPSE 7005 - Student Affairs in Higher Education
3 credit hours Provides an overview of student affairs in higher education. Covers the history and development of student affairs, structure and organization of student affairs divisions, and introduces the profession with an understanding of the expectations and ethics of the field.

SPSE 7007 - Student Success in Higher Education
3 credit hours Overview of student success in higher education. Covers the enhancement of student success through professional learning communities, cultural change, collaboration, and the utilization of data analytics to drive decision-making for student success in higher education leadership.

SPSE 7010 - Educational Research Methodology
3 credit hours Designing research studies, including development of understandings, as well as skills and techniques needed in gathering, structuring, interpreting and presenting data required for educational research. SPSE 7010 is a prerequisite for enrollment in FOED 7610, which is recommended to be taken the following semester.

SPSE 7020 - Classroom Management: Methods and Models
3 credit hours Introduction, examination, and practice in approaches to classroom management through evaluation within a diverse setting. Research on classroom management and discipline within the classroom presented for analysis and interpretation. General topics include theories/models of discipline, management, organization, teacher behaviors, individual differences, and legal issues that impact the teaching and learning environment. Emphasis placed on importance of informed decision making and reflection in relation to classroom management and evaluation.

SPSE 7040 - Seminar in Supervision
3 credit hours Identification and investigation of the problems of supervision and research; experimentation in the use of supervisory techniques.

SPSE 7080 - Studies in Leadership
3 credit hours Roles, responsibilities understandings, and behavior patterns in effective administrative and supervisory personnel. Developing sensitivity to individuals, the nature and structures of groups, and the problems of communication within and among groups and individuals.

SPSE 7090 - Seminar: Conducting Program for School Improvement
3 credit hours Emphasizes motivation, identification of needs and goals, planning and organization, and utilization of various resources as components of successful school improvement programs.

SPSE 7110 - Readings in Educational Administration
3 credit hours Review of the research literature on the social and political processes involved in the development and implementation of public policy and legislation relating to education at the national, state, and local levels.

SPSE 7120 - Professional Internship
9 credit hours Requires approval of departmental chair and agreement of superintendent of the school district. May be substituted for SPSE 6040, SPSE 6600, and SPSE 6400. Educational administration and supervision experiences learned in the school setting under the supervision of a sponsoring mentor. Internship in cooperating school systems.

SPSE 7130 - The Curriculum: Structures and Functions
3 credit hours Scope, sequence, organization, and priorities involved in the development of "continuity of educational experience" from kindergarten through grades 13-14.

SPSE 7150 - Curriculum Study and Instructional Design
3 credit hours Readings in current research relative to basic and emerging ideas of curriculum development and instructional design.

SPSE 7160 - Practicum in Curriculum Development
3 credit hours Principles and practices of curriculum construction applied through simulated and field experiences.

SPSE 7170 - Learning Theories and the Educational Process
3 credit hours Examines the historical and current learning theoretical principles, concepts, and research findings as related to education in a variety of settings. Focuses on cognitive, behavioral, constructivist, and humanistic learning theorists, theories and applications.

SPSE 7180 - Qualitative Evaluation and Research Methods
3 credit hours Theoretical factors, methodological approaches, and frameworks related to evaluating and conducting qualitative research. Students required to identify specific problems and apply qualitative concepts and procedures related to classroom practice.

SPSE 7190 - Professional Field Experience
6 credit hours Provides direct field experience in appropriate areas of education in collaboration with the University, the school mentor, and the student.

SPSE 7200 - Administrative Behavior: Theory into Practice
3 credit hours An exploration of the relevant new developments in the field of educational administration, including recent concepts and research.

SPSE 7210 - Legal Issues in Higher Education
3 credit hours The legal framework as it pertains to higher education and its operations. Special attention given to rights of students as well as professors. Law cases, constitutional provisions, attorney general's opinions, rules and regulations of the Tennessee Board of Regents, Tennessee Board of Trustees, and the Tennessee Higher Education Commission studied and discussed.

SPSE 7220 - Advanced Educational Technology
3 credit hours Advanced teaching strategies using technology with online instruction, distance learning tools, computer simulations, applets, webpage construction, presentation software, streaming-videos and multimedia applications. Explores how technology tools support teaching and research in both K-12 and college level learning environments.

SPSE 7250 - Seminar in Curriculum Improvement
3 credit hours For the advanced major in curriculum development utilizing small group or seminar approach. Issues and research in curriculum improvement analyzed critically.

SPSE 7270 - Learning Theories in Mathematics and Science Education
3 credit hours Exposes Ph.D. students to different theoretical perspectives on learning used in mathematics and science education research. A core program requirement for students in the Mathematics and Science Ph.D. program; helps students develop an understanding of diverse theoretical perspectives on learning and the ability to select, create, and/or justify theoretical frameworks in their research related to mathematics and science education.

SPSE 7280 - Ethnographic Methods and Analysis
3 credit hours Formative theoretical models of ethnography with emphasis on paradigms of thinking, applications, and methods of analysis. Focus on ethical considerations, fieldwork, and related issues present in the naturalistic research environment.

SPSE 7500 - Studies in Education: Administration
1 to 3 credit hours Individual or small group study and/or research in educational administration which provides an opportunity for in-depth study and specialization for majors. To be structured for student needs by teacher. Repeatable up to six hours.

SPSE 7520 - Studies in Education: Curriculum
1 to 3 credit hours Individual or small group study and/or research in the area of curriculum development. To be structured for student needs by teacher. Repeatable up to six hours.

SPSE 7530 - Administration of Higher Education
3 credit hours Complexity of the structure of higher education (national, regional, state, and local) and how it is organized. Attention given to the interrelationships of the institution and its internal and external constituencies.

SPSE 7540 - Overview of Higher Education
3 credit hours Higher education in America. Attention given to its historical, philosophical, political, and sociological background, development, and relationships. Includes current trends and problems,

particularly those which relate to the financial and legal aspects of higher education.

SPSE 7551 - Instructional Development in Higher Education
3 credit hours Prerequisite: Previous college teaching (instructor of record) or completion of the LT&ITC graduate teaching assistant teaching preparation certification program or approval of the instructor. Addresses effective course design, instructional strategies, and use of technology in teaching at the higher education level.

SPSE 7560 - Studies in Education: Supervision
1 to 3 credit hours Individual or small group study and/or research in the area of supervision of instruction. To be based on individual needs and structured by teacher. Repeatable up to six hours.

SPSE 7590 - Independent Study in Higher Education
1 to 3 credit hours A practicum in higher education. Course will vary to meet the needs of individual students who are interested in making a specialized study of current problems in the field of higher education.

SPSE 7710 - Historical and Social Contexts of Multicultural Education
3 credit hours Explores the history of multicultural education, social policy, equity issues and legislation from the settling of America to the current national education initiatives that impact classrooms. Examines the relationship between societal influences, equity issues, and classroom practice in light of the cultural milieu and challenges existing in today's classrooms.

SPSE 7720 - Brain-Based Teaching and Learning in the Classroom
3 credit hours Focuses on applying brain-based learning principles in the classroom. Examines standard educational practices today in light of what we now know about the brain.

SPSE 7730 - Human Diversity in a Variety of Learning Environments
3 credit hours Diversity issues such as race, ethnicity, and culture covered through issues that impact society in general and classroom dynamics (teaching/learning) in particular.

SPSE 7900 - Online Learning and Instructional Design
3 credit hours Assessment of effectiveness and efficiency of various learning systems and learning modules. Stresses need for systematic approaches to instruction. Practice in stating behavioral objectives, motivation, adaptation, evaluation, and systems assessment in which media are utilized as integral parts of learning modules.

SPSE 7905 - Online Course Development for Higher Education
3 credit hours Prerequisite: SPSE 6551 or SPSE 7551 or permission of instructor. Evaluation and application of best practices in online instructional design. Includes a broad overview of instructional design history, theories, and current trends. Applies the principles of online learning and integration of instructional technologies to promote effective online instruction.

SPSE 7970 - Web Based Tools and Curriculum
3 credit hours (Same as LIBS 6970.)
Prerequisite: LIBS 6340 or SPSE 6960. Synthesis of design, creation, and production of instructional curriculum integrating Internet and technology-based tools throughout. Includes analysis and reflection on the curriculum created. Mentor project is completed during the semester.

Youth Education

YOED 5020 - Residency I: Grades K-12
6 credit hours Prerequisites: Admission to teacher education program; successful completion of YOED 2500, YOED 3000, YOED 3300 with a grade of B or better; overall grade point average maintained at a minimum of 2.75; grade point average in the major at a minimum of 2.50; and senior standing. A school-based clinical experience in a problem-based learning format in art, drama, music, or physical education.

YOED 5030 - Residency I: Grades 7-12
9 credit hours Prerequisites: Admission to teacher education program; successful completion of YOED 2500, YOED 3000, YOED 3300 with a grade of B or better; overall grade point average maintained at a minimum of 2.75; grade point average in the major at a minimum of 2.5; and senior standing. A school-based clinical experience in a problem-based learning format.

YOED 5110 - Directed Teaching, Grades 7-12
9 to 12 credit hours Prerequisites: All required professional education courses; appropriate special methods course(s); admission to teacher education. A full-day, full-semester supervised teaching experience in a public school classroom. Pass/Fail.

YOED 5400 - Residency II
12 credit hours Prerequisites: Admission to teacher education program; successful completion of YOED 2500, YOED 3000, YOED 3300, YOED 4020, or YOED 4040 with grade of B or better; passing score(s) on the specialty area exam(s) of Praxis II; overall grade point average maintained at a minimum of 2.75; grade point average in the major at a minimum of 2.50; and senior standing. A full-day, full-semester supervised teaching experience in a public school classroom. Pass/Fail

YOED 5510 - The Teaching Internship, Grades 7-12
3 to 9 credit hours Directed field experience which will meet specific needs related to individual needed competencies. Applicant must meet all prerequisites for directed teaching.

YOED 6000 - Classroom Management
3 credit hours Prerequisite: Admission to the Teacher Education program. Equips teacher candidates with a variety of classroom management strategies and techniques that will foster a positive learning environment in their classrooms. Provides an overview of behavior management models, theories, and research as a foundation for classroom practice. Facilitates, through the use of field experiences, the analysis of school-wide policies/procedures and insight on the real life classroom management expectations of the first-year teacher. Requires a field experience which includes a teacher enhancement plan supported by current literature on best practices and/or data collected from teacher-directed action research.

YOED 6020 - Literacy and Content Instruction for ELs
3 credit hours Analysis and application of strategies, instructional methods, and techniques appropriate for developing and implementing transformative literacy and standards-based content instruction for English learners in the classroom. Focus on state and nationally adopted models for addressing culture within integrated language and academic content lessons and unit plans. Fieldwork required.

YOED 6030 - Methods, Instruction, and Assessment for Teaching ELs in Regular Education Classrooms
3 credit hours Focuses on meeting the varied needs of English learners within the regular education (non-ESL) classroom. Examines appropriate accommodations, curriculum adjustments, techniques for building academic language within content instruction, communicative group work, differentiation, and formative assessment strategies to identify needs to inform instruction. Emphasis placed on collaboration between the regular education teacher and the ESL professional.

YOED 6100 - Aviation Education Workshop
3 credit hours (Same as AERO 6100.) A fundamental course in aviation education offered through a grant from the Tennessee Department of Transportation (TDOT) to Tennessee educators; designed to provide K-12 educators aviation education classroom strategies and materials. Includes an aircraft flight and a field trip.

YOED 6120 - Residency I: Grades K-12 Graduate
6 credit hours Prerequisites: Admission to Teacher Education program; successful completion of YOED 6000 and YOED 6500; overall grade point average maintained at a minimum of 2.75. Consists of completing and reflecting on a school-based clinical experience (in a problem-based learning format) in K-12 education.

YOED 6220 - Seminar in edTPA Professional Performance
6 credit hours Prerequisites: Admission to teacher education program; successful completion of YOED 6000 and YOED 6500; overall grade point average maintained at a minimum of 2.75. Consists of an edTPA preparation experience in a problem-based learning format.

YOED 6300 - Problem-Based Instructional Strategies
3 credit hours Prerequisite: Admission to Teacher Education Program. Offers preparation for students to develop and present instructional strategies that frame curriculum content in problem-solving contexts. Requires a field experience in a public school setting which includes a teacher enhancement plan supported by current literature on best practices and/or data collection from teacher-directed action research.

YOED 6500 - Planning and Assessment
3 credit hours Prerequisite: Admission to the Teacher Education program. Offers preparation for teacher candidates to plan for instruction, to assess student learning, and to understand how classroom assessments and standardized testing impact instruction. Introduces lesson planning with respect to a wide range of contextual factors, and through the use of field experiences, provides opportunities for the analysis of planning and assessment procedures in real life contexts. Field experience required which includes a teacher enhancement plan supported by current literature on best practices and/or data collection from teacher-directed action research.

YOED 6540 - Topics in Aerospace Education
1 to 3 credit hours (Same as AERO 6540.) Content varies with needs of individual students who are interested in making a specialized study of current problems in the field of aerospace education.

YOED 6680 - Issues and Trends in Teaching and Learning
3 credit hours Emphasis on examining current issues and trends in teaching and learning.

YOED 6700 - Advanced Aviation Education Workshop
3 credit hours (Same as AERO 6700.) Prerequisite: YOED 6100. Second course in aviation education offered through a grant from the Tennessee Department of Transportation (TDOT) to Tennessee educators; designed to provide K-12 educators aviation education classroom strategies and materials. Includes an aircraft cross-country flight and a field trip.

YOED 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Elementary and Special Education

Eric Oslund, Interim Chair
(615) 898-2680
www.mtsu.edu/elementary/

The Department of Elementary and Special Education offers the Master of Education degree with majors in Curriculum and Instruction, Literacy, and Special Education as well as graduate minors in Curriculum and Instruction and Special Education. A certificate in Digital Teaching and Learning is also offered.

The major in Curriculum and Instruction offers a concentration in Elementary School Education. A specialization in initial licensure is also available. Concentrations in Mildly/Moderately Disabled Students and Severely/Profoundly Disabled Students are available through the Special Education major. Initial licensure with an Interventionist (Mildly/Moderately, Disabled concentration) specialization is available.

Curriculum and Instruction Minor

Elementary and Special Education
The Curriculum and Instruction minor does not meet licensure requirements in elementary education. Students desiring a graduate minor in Curriculum and Instruction in Early Childhood, Elementary School Education, or Middle School Education should complete 18 semester hours in elementary education.

Curriculum

Required Courses (12 hours):

- ELED 6090 - Creating Learning Environments for Young Children **3 credit hours**
- ELED 6100 - The Early Adolescent Learner **3 credit hours**
- ELED 6200 - The Classroom as Community **3 credit hours**
- ELED 6620 - Assessment of Teaching and Learning **3 credit hours**

Electives (6 hours):

Chosen in consultation with advisor

Curriculum and Instruction, Elementary School Education Concentration, M.Ed.

Jeremy Winters, Co-Program Director
(615) 494-7729
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Tracey Huddleston, Co-Program Director
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The Department of Elementary and Special Education offers the Master of Education degree with a major in Curriculum and Instruction and a concentration in Elementary School Education (grades K-6). Please see Curriculum and Instruction with Initial Licensure if interested in earning a license.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Students seeking admission to the Master of Education program are expected to score at least 380 on the Miller Analogies Test or 281 on the Graduate Record Examination or the minimum on a National Teachers Examination that meets Tennessee licensure standards.
Applicant must

1. have at least a 2.75 undergraduate GPA for full admission and 2.50 undergraduate GPA for conditional admission;
2. have elementary teaching licensure, the attainment of which may require additional undergraduate courses prior to the completion of the degree;
3. have an initial conference with an appropriate graduate advisor in the Department of Elementary and Special Education.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE), Principles of Learning and Teaching Exam (PRAXIS II), or Miller Analogies Test (MAT).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Education in Curriculum and Instruction with a concentration in Elementary Education requires completion of 33 semester hours.
Candidates must successfully complete a comprehensive exam to be taken in the last semester of coursework (may be taken no more than twice).

Curriculum: Curriculum and Instruction, Elementary School Education Concentration

The following illustrates the coursework requirements.

Required Courses (33 hours)

- ELED 6220 - Seminar in Elementary Education **1 to 3 credit hours (3 credit hours required)**
- ELED 6340 - Introduction to Educational Research **3 credit hours**
- ELED 6370 - Education and Ethno-Cultural Diversity **3 credit hours**
- ELED 6630 - Digital Learning in a Digital Age **3 credit hours**
- ELED 6570 - Methods of Curriculum Integration **3 credit hours**
- ELED 6580 - Effective Management Practices for the Elementary Classroom **3 credit hours**
- ELED 6620 - Assessment of Teaching and Learning **3 credit hours**
- ELED 6290 - Research into Practice **3 credit hours**
- ELED 6450 - Current Trends and Issues in the Elementary School **3 credit hours**
- ELED 6650 - Curriculum: Inquiry and Thinking **3 credit hours**
- ELED 6670 - Advanced Content Methods **3 credit hours**

Program Notes

Any course requiring admission to Teacher Education may require observations, case studies, or other time in K-6 classes.

Curriculum and Instruction, Initial Licensure Specialization, M.Ed.

Tracey Huddleston, Program Director
(615) 898-2680
Tracey.Huddleston@mtsu.edu
The Department of Elementary and Special Education offers the Master of Education degree with a major in Curriculum and Instruction which can be obtained two ways. If a current license in Elementary Education is held, a student may pursue the master's degree in Curriculum and Instruction, Elementary School Education. If a current license in Elementary Education is NOT held, a student may pursue the Initial Licensure program providing licensure in Elementary Education K-5 and a Master's degree in Curriculum and Instruction.
Please see undergraduate catalog for information regarding undergraduate program.

Admission Requirements

Students seeking admission to the Master of Education program are expected to score at least 380 on the Miller Analogies Test or 281 on the Graduate Record Examination or the minimum on a National Teachers Examination that meets Tennessee licensure standards.
Applicant must

1. have at least a 2.75 undergraduate GPA for full admission and 2.50 undergraduate GPA for conditional admission;
2. have elementary teaching licensure, the attainment of which may require additional undergraduate courses prior to the completion of the degree;
3. have an initial conference with an appropriate graduate advisor in the Department of Elementary and Special Education.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**).Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Miller Analogies Test (MAT), Graduate Record Examination (GRE), or Principles of Learning and Teaching Exam (PRAXIS II).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Education in Curriculum and Instruction with an initial licensure specialization requires completion of 48 semester hours that includes a nine-hour internship.
Candidate must

1. meet requirements for admission to teacher education and internship in addition to the traditional graduate admission requirements;
2. successfully complete a written comprehensive exam to be taken in the last semester of coursework (may be taken no more than twice).

Curriculum: Curriculum and Instruction, Initial Licensure

The following illustrates the coursework requirements.

Required Courses (9 hours)

- ELED 6340 - Introduction to Educational Research **3 credit hours**
- ELED 6570 - Methods of Curriculum Integration **3 credit hours**
- ELED 6580 - Effective Management Practices for the Elementary Classroom **3 credit hours**

Specialized Core (9 hours)

- ELED 6370 - Education and Ethno-Cultural Diversity **3 credit hours**
- ELED 6500 - The Science of Learning and Teaching **3 credit hours**
- SPED 6800 - Exceptional Children and Youth **3 credit hours**

Specialized Courses (21 hours)

All courses require admission to Teacher Education.

- ELED 6510 - Language Arts **3 credit hours**
- ELED 6530 - Teaching Social Studies **3 credit hours**
- ELED 6540 - Teaching Science **3 credit hours**
- ELED 6550 - Teaching Mathematics **3 credit hours**
- ELED 6560 - Assessment **3 credit hours**
- READ 5130 - Literacy Assessment **3 credit hours**
- READ 6520 - Teaching Reading **3 credit hours**

Specialized Required Internship (9 hours)

Requires admission to Teacher Education

- ELED 5510 - The Teaching Internship, Grades 1-8 **9 credit hours**

Program Notes

Any of the courses above may require observations, case studies, or other time in K-5 classrooms.

Literacy, M.Ed.

Joan Boulware, Program Director
(615) 904-8243
Joan.Boulware@mtsu.edu
The Department of Elementary and Special Education offers the Master of Education degree with a major in Literacy that leads to the Literacy endorsement, Reading Specialist, PreK-12.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Students seeking admission to the Master of Education program are expected to score at least 380 on the Miller Analogies Test or 281 on the Graduate Record Examination or the minimum on a National Teachers Examination (Praxis II) that meets Tennessee licensure standards.
Tennessee Reading Specialist Certification requirements include

1. three successful years of classroom experience,
2. pass Praxis 10300,
3. complete advanced studies addressing Reading Specialist standards.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**).Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE), Principles of Learning and Teaching Exam (PRAXIS II), or Miller Analogies Test (MAT);
3. submit official transcripts of all previous college work (GPA of previous work should be 3.0 or higher.);
4. participate in an intake interview;
5. have a bachelor's degree in Education or initial licensure.

Degree Requirements

The Master of Education in Literacy requires completion of 33 semester hours.
Candidates must successfully complete a comprehensive examination to be taken in the last semester of coursework (may be taken no more than twice).

Curriculum: Literacy

The following illustrates the coursework requirements.

Required Courses (24 hours)

- ELED 6000 - Teaching Writing **3 credit hours**
- READ 6000 - Foundations of Literacy **3 credit hours** *
- READ 6710 - Adolescent Literacy **3 credit hours** *
- READ 6730 - Curriculum and Supervision of Literacy Instruction **3 credit hours** *
- READ 6750 - Research in Literacy **3 credit hours**
- READ 6760 - Early Literacy **3 credit hours** *

- READ 6790 - Literacy Practicum **3 to 6 credit hours (3 credit hours required)** *
  ***required for licensure**

- DYST 6000 - Introduction to Dyslexia and Other Reading Difficulties **3 credit hours** OR
- SPED 6100 - Differentiation and Literacy: Teaching Corrective Reading and Writing **3 credit hours**

Electives (9 hours)

Choose three courses from the following:

- DYST 6010 - Identifying Students with Dyslexia and Other Reading Difficulties **3 credit hours**
- DYST 6011 - Interventions for Dyslexia and Other Reading Difficulties **3 credit hours**
- PSY 6530 - The Psychology of Reading and Reading Development **3 credit hours**
- SPSE 6800 - Curriculum Design and Instruction for ELs **3 credit hours**

- DYST 6000 - Introduction to Dyslexia and Other Reading Difficulties **3 credit hours** OR
- SPED 6100 - Differentiation and Literacy: Teaching Corrective Reading and Writing **3 credit hours**

Program Notes

Any course requiring admission to Teacher Education may require observations, case studies, or other time in PreK-12 classes.

Special Education, Mildly/Moderately Disabled Students Concentration, M.Ed.

Zaf Khan, Program Director
(615) 904-8429
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The Department of Elementary and Special Education offers the Master of Education degree with a major in Special Education and concentrations in Mildly/Moderately Disabled Students and Severely/Profoundly Disabled Students. The Mildly/Moderately Disabled Students program could lead to an add-on endorsement or initial licensure in either K-8 or 6-12 Interventionist licensure.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants who currently hold a teaching license and are seeking advancement of knowledge and skills in Special Education may apply for admission to the M.Ed. in Special Education program. Applicants seeking initial licensure in either K-8 and/or 6-12 Interventionist must hold a bachelor's degree from a regionally accredited college or university and must meet all initial licensure clinical practice program requirements, including a semester of residency or meeting the requirements of a job-embedded candidate.
Students seeking admission to the Special Education program must have an undergraduate GPA of 2.75 or higher or a minimum of twelve hours in special education at the graduate level with a GPA of 3.00 or higher.
Applicants can choose from the following admission requirements:
Applicants must take the Miller Analogies Test (and obtain a minimum score of 385) or the Graduate Record Exam (obtaining scores on the Verbal and Quantitative measures which normally exceed 146 and 140 respectively with a total combined score that normally exceeds 286.
OR
Applicants must provide

1. an electronic portfolio containing information according to the template that will be provided;
2. a resume or curriculum vitae (CV) describing previous education, work, teaching, research experience, honors and awards (no more than four pages);
3. a written personal statement (1-2 pages) explaining their interest in a career in special education and how the applicant will positively affect student achievement;
4. three letters of recommendation. Those making recommendations must give their personal impressions of applicant's ability, aptitude in research or professional skills, character, and the quality of previous work and potential for future productive scholarship.

Special Notes:

- Faculty may request an interview with the applicant if needed.
- Applicants must contact the special education coordinator for the format of the electronic portfolio.
- Applicants will receive initial licensure clinical practice program requirements if enrolled in an initial licensure program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Education in Special Education with a concentration in Mildly/Moderately Disabled Students requires completion of a total of 33-39 semester hours.
Candidates must successfully complete a written comprehensive examination to be taken in the last semester of coursework (may be taken no more than twice).

Curriculum: Special Education, Mildly/Moderately Disabled Students (K-8 Interventionist Licensure)

The following illustrates the coursework requirements.

Required Core (9-15 hours)

- SPED 6020 - Overview of Special Education **3 credit hours**
- SPED 6780 - School Law and Policy: Special Education Issues **3 credit hours**

- SPED 6350 - Residency: Directed Clinical Teaching **3 to 9 credit hours** OR
- SPED 6710 - Action Research in Special Education **3 credit hours** *

Concentration Courses (18 hours)

- SPED 5380 - Co-teaching in Inclusive Classrooms **3 credit hours**
- SPED 6100 - Differentiation and Literacy: Teaching Corrective Reading and Writing **3 credit hours**
- SPED 6310 - Issues in Assessment of High Incidence Disabilities **3 credit hours**
- SPED 6330 - Theory and Instructional Practice for Students with High Incidence Disabilities **3 credit hours**
- SPED 6600 - Advanced Math Strategies for High Incidence Disabilities **3 credit hours**
- SPED 6650 - Data, Analytics, and Adaptive Learning **3 credit hours**

Restricted/Specialized Electives (6 hours)

- SPED 5300 - Advanced Applied Behavioral Interventions and Supports **3 credit hours**
- Digital Tools and Methods in Flexible Learning Environments **3 credit hours**

NOTE:

*SPED 6710 only required of candidates seeking non-licensure.

Curriculum: Special Education, Mildly/Moderately Disabled Students (6-12 Interventionist Licensure)

The following illustrates the coursework requirements.

Required Core (9-15 hours)

- SPED 6020 - Overview of Special Education **3 credit hours**
- SPED 6780 - School Law and Policy: Special Education Issues **3 credit hours**

- SPED 6350 - Residency: Directed Clinical Teaching **3 to 9 credit hours** OR

- SPED 6710 - Action Research in Special Education **3 credit hours** *

Concentration Courses (18 hours)

- SPED 5380 - Co-teaching in Inclusive Classrooms **3 credit hours**
- SPED 6100 - Differentiation and Literacy: Teaching Corrective Reading and Writing **3 credit hours**
- SPED 6310 - Issues in Assessment of High Incidence Disabilities **3 credit hours**
- SPED 6330 - Theory and Instructional Practice for Students with High Incidence Disabilities **3 credit hours**
- SPED 6600 - Advanced Math Strategies for High Incidence Disabilities **3 credit hours**
- SPED 6650 - Data, Analytics, and Adaptive Learning **3 credit hours**

Restricted/Specialized Electives (6 hours)

Choose the following if seeking licensure; otherwise, courses should be selected with consent of advisor.

- SPED 5240 - Methods and Techniques of Behavior Management **3 credit hours**
- SPED 5370 - Transition Education and Services for Exceptional Learners **3 credit hours**

NOTE:

*SPED 6710 only required of candidates seeking non-licensure.

Master's in Special Education-Non-Licensed

Applicants must have a teaching license in special education for admission to the program in Special Education with a concentration in Mildly/Moderately Disabled Students and one of the academic Interventionist pathways. Candidates without the appropriate license may be admitted to the graduate program as an initial licensure, degree-seeking student. Once licensure requirements are met, candidate may reapply for admission to the program in special education. Candidates not licensed in special education must apply for a waiver to the license requirement by signing a waiver form stating they wish to receive a master's degree in special education without a license to teach.

Program Notes

Any course requiring admission to Teacher Education may require observations, case studies, micro clinical teaching in K-8 or 6-12 special education classroom settings.
Candidate must file a notice to register for the capstone (e-portfolio) project within the first two months in the last semester of coursework.

Special Education, Severely/Profoundly Disabled Students Concentration, M.Ed.

Thomas Black, Program Director
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Thomas.Black@mtsu.edu
The Department of Elementary and Special Education offers the Master of Education degree with a major in Special Education and concentrations in Mildly/Moderately Disabled Students and Severely/Profoundly Disabled Students. The Severely/Profoundly Disabled Students concentration can lead to an add-on Special Education Comprehensive endorsement.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Applicants who currently hold a teaching license and are seeking advancement of knowledge and skills in Special Education may apply for admission to the M.Ed. in Special Education Severely/Profoundly Disabled Students program. Applicants seeking initial licensure in either K-8 and/or 6-12 Interventionist must hold a bachelor's degree from a regionally accredited college or university and must meet all initial licensure clinical practice program requirements, including a semester of residency or meeting the requirements of a job-embedded candidate.
Students seeking admission to the Special Education program must have an undergraduate GPA of 2.75 or higher or a minimum of twelve hours in special education at the graduate level with a GPA of 3.00 or higher.
Applicants can choose from the following admission requirements:
Applicants must take the Miller Analogies Test (and obtain a minimum score of 385) or the Graduate Record Exam (obtaining scores on the Verbal and Quantitative measures which normally exceed 146 and 140 respectively with a total combined score that normally exceeds 286.
OR
Applicants must provide

1. an electronic portfolio containing information according to the template that will be provided;
2. a resume or curriculum vitae (CV) describing previous education, work, teaching, research experience, honors and awards (no more than four pages);
3. a written personal statement (1-2 pages) explaining their interest in a career in special education and how the applicant will positively affect student achievement;
4. three letters of recommendation. Those making recommendations must give their personal impressions of applicant's ability, aptitude in research or professional skills, character, and the quality of previous work and potential for future productive scholarship.

Special Notes:

- Faculty may request an interview with the applicant if needed.
- Applicants must contact the special education coordinator for the format of the electronic portfolio.
- Applicants will receive initial licensure clinical practice program requirements if enrolled in an initial licensure program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT).
3. submit official transcripts of all previous college work.

Degree Requirements

The Master of Education in Special Education with a concentration in Severely/Profoundly Disabled Students requires completion of a total of 36 semester hours.
Candidates must successfully complete a written comprehensive examination to be taken in the last semester of coursework (may be taken no more than twice).

Curriculum: Special Education, Severely/Profoundly Disabled Students

The following illustrates the coursework requirements.

Required Core (9 hours)

- SPED 6020 - Overview of Special Education **3 credit hours**
- SPED 6780 - School Law and Policy: Special Education Issues **3 credit hours**
- SPED 6710 - Action Research in Special Education **3 credit hours**

Concentration Courses (18 hours)

- FOED 6610 - Analysis and Application of Educational Research **3 credit hours**
- SPED 6410 - Characteristics and Teaching of Learners with Low Incidence Disabilities **3 credit hours**
- SPED 6910 - Developmental Assessment **3 credit hours**
- SPED 5370 - Transition Education and Services for Exceptional Learners **3 credit hours**
- SPED 6720 - Promoting Family-Professional Partnerships in Special Education **3 credit hours**
- SPED 5380 - Co-teaching in Inclusive Classrooms **3 credit hours**

Restricted/Specialized Electives (9 hours)

To be selected with consent of advisor or the following if seeking licensure:

- SPED 5240 - Methods and Techniques of Behavior Management **3 credit hours**
- SPED 5260 - Problems in Special Education A-Z **1 to 3 credit hours**
- SPED 5280 - Assistive Technology in Special Education **3 credit hours**

Special Education Master's-Non-Licensed

Applicants must have a teaching license in special education for admission to the program in Special Education. Candidates without the appropriate license may be admitted to the graduate program as a non-degree-seeking student. Once licensure requirements are met, candidate may reapply for admission to the program in special education. Candidates not licensed to teach must apply for a waiver to the license requirement by signing a waiver form stating they wish to receive a master's degree in special education without a license to teach.

Program Notes

Any course requiring admission to Teacher Education may require observations, case studies, or other time in K-6 classes.

Dyslexic Studies

DYST 6000 - Introduction to Dyslexia and Other Reading Difficulties
3 credit hours Prerequisite: Permission of the instructor. Overview of the history and science of dyslexia and other reading disabilities. Examines the value of integrating insights from the cognitive psychology and neuroscience into diagnostic, therapeutic, and instructional models of literacy. Explores the etiology and prevalence of reading disabilities and addresses current issues in assessment and intervention.

DYST 6010 - Identifying Students with Dyslexia and Other Reading Difficulties
3 credit hours Prerequisites: Permission of the instructor and DYST 6000. Details the profile of dyslexia and other reading disabilities. Develops competency in choosing appropriate testing batteries for identification, administering valid and reliable measures, and interpreting and communicating the results. Outlines how to use assessment data to plan instruction and monitor progress.

DYST 6011 - Interventions for Dyslexia and Other Reading Difficulties
3 credit hours Prerequisites: Permission of instructor and DYST 6000. Details the elements of intervention for children with dyslexia and other reading disabilities. Increases competency in identifying and implementing effective interventions based on student skills and characteristics. Covers evidence-based interventions in phonemic awareness, phonics, fluency, vocabulary, comprehension, and writing.

DYST 6012 - Multisensory Teaching Strategies with Practicum
4 credit hours Prerequisite: Permission of the department and bachelor's degree or advanced degree in the education field. Focuses on the multisensory teaching of reading, spelling, and handwriting as well as advanced skills such as syllabication and structural analysis. Participants learn theory and teaching strategies and then apply this knowledge while tutoring a student twice a week for ten weeks. Students will submit two videotapes of lesson and supporting materials to the instructor for critique.

DYST 6020 - Adolescents with Dyslexia and Other Literacy Difficulties
3 credit hours Prerequisite: Permission of instructor and bachelor's degree or advanced degree in the education field. Overview of literacy difficulties faced by adolescents with particular emphasis on dyslexia. Develops competency in assessing and planning for literacy instruction, within and beyond the general education classroom setting in middle and high school.

DYST 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

DYST 7000 - Introduction to Dyslexia and Other Reading Difficulties
3 credit hours Prerequisite: Permission of the instructor. Overview of the history and science of dyslexia and other reading disabilities. Examines the value of integrating insights from the cognitive psychology and neuroscience into diagnostic, therapeutic, and instructional models of literacy. Explores the etiology and prevalence of reading disabilities and addresses current issues in assessment and intervention.

DYST 7010 - Identifying Students with Dyslexia and Other Reading Difficulties
3 credit hours Prerequisites: Permission of the instructor and DYST 7000. Details the profile of dyslexia and other reading disabilities. Develops competency in choosing appropriate testing batteries for identification, administering valid and reliable measures, and interpreting and communicating the results. Outlines how to use assessment data to plan instruction and monitor progress.

DYST 7011 - Interventions for Dyslexia and Other Reading Difficulties
3 credit hours Prerequisites: Permission of the instructor and DYST 7000. Details the elements of intervention for children with dyslexia and other reading disabilities. Increases competency in identifying and implementing effective interventions based on student skills and characteristics. Covers

evidence-based interventions in phonemic awareness, phonics, fluency, vocabulary, comprehension, and writing.

Early Childhood Education

ECE 5300 - Preschool Practicum
3 credit hours Prerequisites: CDFS 2350 or ECE 2350, CDFS or ECE 3310, CDFS 4370 or ECE 4370, and permission of instructor. Corequisite: ECE 5301. Advanced information and skills working with three- and four-year-olds. Lab interaction with children; planning and implementation of curriculum. Laboratory plus two-hour seminar per week.

ECE 5301 - Preschool Practicum Lab
0 credit hours Corequisite: ECE 5300.

ECE 5350 - Parenting
3 credit hours Developing knowledge and understanding of parenting and parent/child interaction theories. Examination and development of parent education programs.

ECE 5360 - Administering Early Childhood Programs
3 credit hours Prerequisites: Admission to teacher education; ECE 4300 or ECE 4380; or permission of instructor. Examines diverse early care and education settings and their influence on child development. Emphasis on program planning and administration in early childhood settings. One hour per week of observation required.

ECE 5370 - Effective Instruction (Birth-5 years)
3 credit hours Prerequisites: CDFS 2350 or ECE 2350, CDFS or ECE 3310, or permission of instructor. A comprehensive exploration of the knowledge and skills necessary for designing and implementing curricula appropriate for programs serving children birth to five years.

ECE 5380 - Infant and Toddler Practicum
3 credit hours Prerequisites: CDFS 2350 or ECE 2350, CDFS or ECE 3310, and ECE 4370/ECE 5370 or permission of instructor. Corequisite: ECE 5381. Advanced information and skills in working with infants and toddlers (birth to three years). Lab participation involving interactions with children as well as planning and implementing curriculum required. Laboratory and a two-hour seminar per week.

ECE 5381 - Infant and Toddler Practicum Lab
0 credit hours Corequisite: ECE 5380.

ECE 6320 - Advanced Strategies for Assessment and Data Analysis with Young Children
3 credit hours Discussion and practice of assessment and evaluation strategies used with young children and their families. Data analysis for progress monitoring, program planning, and accountability discussed and practiced. Will be taught as a hybrid.

ECE 6350 - Supporting Families of Young Children
3 credit hours Prerequisite: SPED 6900. Develops knowledge and understanding of family and family interaction theories. Examines, develops, and reflects on approaches and strategies for supporting families.

Elementary Education

ELED 5201 - Observation and Participation: Grades 1-6
3 credit hours Directed laboratory experiences for teachers desiring to add an endorsement to their certificates. Includes language arts, math, science, social studies, art, and music.

ELED 5260 - Problems in Elementary Education
1 to 3 credit hours A problem-oriented course, on or off campus, planned and designed for individuals, school faculty, school systems, or other professional groups that will provide opportunities for in-service education related to assessed needs. Credit toward a degree limited to six semester hours.

ELED 5510 - The Teaching Internship, Grades 1-8
9 credit hours A supervised internship available only to those with at least one year of paid teaching experience in the major in which endorsement is sought. Applicants must meet all prerequisites for student teaching.

ELED 6000 - Teaching Writing
3 credit hours An in-depth exploration of students' efforts to become writers. Presents theoretical and practical strategies for establishing an effective writing environment based on current research.

ELED 6010 - The Teacher as Reflective Practitioner
3 credit hours Articulates the role of and explores the varied dimensions of the process of reflective teaching as it may be utilized by the elementary, special education, reading, or secondary teacher. Prerequisite for all Curriculum and Instruction (Early Childhood Education, Elementary School Education, and Middle School Education) candidates.

ELED 6090 - Creating Learning Environments for Young Children
3 credit hours Prerequisite: ELED 6010. In-depth analysis of social, emotional, language, and cognitive variables that impact young children's learning and allow teachers to plan and maintain proactive environments. Required for those students wishing to concentrate in Early Childhood Education.

ELED 6100 - The Early Adolescent Learner
3 credit hours Prerequisite: ELED 6010. Reflects on the early adolescent while focusing on the student-centered school environment and the appropriately well-balanced curriculum. Required for those students wishing to concentrate in Middle School Education.

ELED 6180 - Research and Advanced Methods in Elementary School Mathematics
3 credit hours Explores knowledge and methods needed to effectively teach elementary school mathematics in relation to current research on mathematical pedagogy. Reflects upon teaching in comparison to the current literature on best practices in order to effectively implement these strategies.

ELED 6200 - The Classroom as Community
3 credit hours Prerequisite: ELED 6010. Explores the classroom community with respect to definitions and practice. Teachers will reflect on how their beliefs and attitudes influence practice. Required for all students.

ELED 6220 - Seminar in Elementary Education
1 to 3 credit hours Explores contemporary issues in education as they relate to individual teaching and learning. Designed to be a forum for discussion and practical application of current educational research.

ELED 6252 - Technologies that Invite and Adapt: Teaching and Learning in a Media World
3 credit hours Explores content and technologies available to teachers of elementary and middle school children. Focuses on the adaptation of existing technologies to enhance student learning

ELED 6253 - Web-Based Multimedia Development for Elementary and Middle School
3 credit hours The design, development, and implementation of knowledge-based multimedia learning environments for elementary and middle school students.

ELED 6260 - Problems in Elementary Education
1 to 3 credit hours A problems course offering an opportunity to study, discuss, and evaluate current problems in elementary education from a K-6 perspective.

ELED 6290 - Research into Practice
3 credit hours An in-depth study of the inquiry process as it relates to teachers in the classroom. Theory and practice combine as teachers engage in their own research to improve classroom instruction.

ELED 6330 - Play
3 credit hours Content provides educators with the social, emotional, and cognitive benefits of play for children's learning and development.

ELED 6340 - Introduction to Educational Research
3 credit hours Research methodologies in education. Rationalistic and naturalistic paradigms explored with respect to problem statements and literature reviews. At the 7000 level, students will broaden the scope of their research to include original data collection, analysis, and interpretation.

ELED 6350 - Introduction to Qualitative Methods
3 credit hours An overview of qualitative research methods in the field of education. ELED 7350 offers candidates field experience to collect data for analysis and interpretation.

ELED 6360 - Interpreting Data for Decision Making
3 credit hours Prerequisite: ELED 6340/ ELED 7340. Introduces various ways to collect, analyze, and interpret rationalistic data.

ELED 6370 - Education and Ethno-Cultural Diversity
3 credit hours Explores the ethno-cultural issues, concepts, and theories that impact teaching practice. Course content linked to students' (anticipated) professional needs and interests. Prior professional, cross-cultural, or international experience welcomed.

Exposes participants to social dimensions of ethno-cultural diversity that increasingly impact pedagogy.

ELED 6380 - Empowerment Through Literacy
3 credit hours Introduction of power structures in the country as a whole and in schools. Language structures; how language and literacy play a role in defining identities of power.

ELED 6390 - STEM Education in the Elementary School
3 credit hours Prerequisite: ELED 6010. Explores research and current trends in science, technology, engineering, and mathematics (STEM) in the elementary school classroom. Reflection upon the importance of teaching and integrating the STEM disciplines.

ELED 6400 - Teaching the Special Needs Learner in the Heterogeneous Classroom
3 credit hours Prerequisite: ELED 6010 (prerequisite requirement for elementary education majors only). Helps develop skills, beliefs, and attitudes necessary for effectively incorporating and teaching special needs learners in a heterogeneous classroom.

ELED 6450 - Current Trends and Issues in the Elementary School
3 credit hours Explores current issues and trends in the elementary school. Reflection upon the impact for teachers, students, and learning outcomes.

ELED 6460 - Contemporary Literacies
3 credit hours Examines contemporary aspects of literacy education in many genres. Attention given to current research along with the principles of teaching reading and writing using a variety of literacy frameworks.

ELED 6470 - Designing and Implementing Problem Based Learning
3 credit hours Provides a template for designing, implementing, and assessing problem-based learning in K-8 classrooms.

ELED 6480 - Problem-Based Learning: Teacher as Mentor
3 credit hours Prerequisite: ELED 6470. Knowledge, skills, and dispositions needed to effectively communicate, assess, and mentor teacher candidates.

ELED 6500 - The Science of Learning and Teaching
3 credit hours Explores educational theory, classroom management and learning environments. Candidates use both theory and data to inform practice.

ELED 6510 - Language Arts
3 credit hours Explores language learning and teaching. Introduces various theories about cognition, language, and language learning, including second language acquisition and various strategies for teaching language arts. Public school practicum required.

ELED 6530 - Teaching Social Studies
3 credit hours Prerequisite: Valid teaching license or acceptance into the teacher education program. Introduces students to philosophy and need for teaching social studies in the K-6 classroom and to a variety of instructional strategies for teaching social studies.

ELED 6540 - Teaching Science
3 credit hours Prerequisites: Admission to the teacher education program; ELED 6500. Introduces students to various philosophies for teaching science in the K-6 classroom and to a variety of instructional strategies for teaching science.

ELED 6550 - Teaching Mathematics
3 credit hours Prerequisites: Admission to teacher education program or a valid teaching license; ELED 6500. Orientation to the teaching strategies and materials appropriate for teaching mathematics in grades K-6. Emphasis on using a constructivist approach.

ELED 6560 - Assessment
3 credit hours Prerequisite: Admission to teacher education program. Explores evaluation and assessment of children in grades K-6.

ELED 6570 - Methods of Curriculum Integration
3 credit hours Prerequisite: Acceptance into graduate studies and the initial licensure program. Acquaints students with the philosophy and need to teach mathematics, English/language arts, social studies, and science in the elementary classroom; familiarizes students with a variety of instructional strategies for teaching these content areas in an integrated approach.

ELED 6580 - Effective Management Practices for the Elementary Classroom
3 credit hours Prerequisite: Completion of a minimum of 6 graduate hours or acceptance in the Initial Licensure Program. Introduces students to classroom and instructional strategies to build, adjust, and maintain an effective classroom learning environment.

ELED 6620 - Assessment of Teaching and Learning
3 credit hours Prerequisite: ELED 6010 (or taken concurrently with ELED 6010 by Elementary Education major only). Familiarizes teachers with assessment techniques that focus on the complex relationship between learning and instruction. Required for all students.

ELED 6630 - Digital Learning in a Digital Age
3 credit hours Provides graduate candidates practice and skills related to digital literacy, the nine elements of digital citizenship, and twenty-first century readiness. Candidates examine the personal and ethical implications of individual actions in digital space.

ELED 6640 - Thesis: Elementary Education
1 to 3 credit hours Prerequisite: Six semester hours of 6000-level courses in elementary education. Supervised in-depth study on an individual basis of an area of elementary education.

ELED 6650 - Curriculum: Inquiry and Thinking
3 credit hours Explores the perspective of curriculum as inquiry and the theoretical and practical implications of designing content-based curriculum with an emphasis on the integration of multiple types of thinking that serve understanding across disciplines. Explores putting a system of beliefs into action.

ELED 6670 - Advanced Content Methods
3 credit hours In-depth analysis of the content pedagogical knowledge in English language arts, mathematics, science, and social studies. Field experience component included.

ELED 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

ELED 7220 - Seminar in Elementary Education
1 to 3 credit hours Explores contemporary issues in education as they relate to individual teaching and learning. Designed to be a forum for discussion and practical application of current educational research.

ELED 7250 - From Policy to Practice in American Public Schools
3 credit hours The effect of public policy on educational practices. Emphasis on exploring policy variations within the educational practices in the U.S. and around the world with a particular emphasis on elementary education.

ELED 7260 - Problems in Elementary Education
1 to 6 credit hours Prerequisite: Nine semester hours of graduate-level courses in elementary education.

ELED 7290 - Research into Practice
3 credit hours An in-depth study of the inquiry process as it relates to teachers in the classroom. Theory and practice combine as teachers engage in their own research to improve classroom instruction.

ELED 7340 - Introduction to Educational Research
3 credit hours Prerequisite: Six semester hours of 7000-level courses in elementary education. Supervised in-depth study on an individual basis of an area of elementary education.

ELED 7350 - Introduction to Qualitative Methods
3 credit hours An overview of qualitative research methods in the field of education. ELED 7350 offers candidates field experience to collect data for analysis and interpretation.

ELED 7360 - Interpreting Data for Decision Making
3 credit hours Prerequisite: ELED 6340/ELED 7340. Design, data collection, and analyses for various approaches within quantitative research. Lab work using SPSS statistical package required.

ELED 7380 - Internship
3 credit hours Prerequisites: Enrollment in Ed.S. Curriculum and Instruction program; good academic standing; completion of at least 12 hours of coursework. Field-based experience selected by

student in collaboration with program advisor. Purpose is to expand the student's world view of a career connected to curriculum and instruction issues across a spectrum of disciplines.

ELED 7460 - Contemporary Literacies
3 credit hours Examines contemporary aspects of literacy education in many genres. Attention given to current research along with the principles of teaching reading and writing using a variety of literacy frameworks.

ELED 7640 - Ed.S. Thesis Research
1 to 6 credit hours Prerequisite: Six semester hours of 7000-level courses in elementary education. Supervised, in-depth study on an individual or group basis of an area of elementary education. Student may register two semesters for three hours credit each semester or for six hours credit one semester. Open only to post-master's degree students.

Reading

READ 5130 - Literacy Assessment
3 credit hours Prerequisite: A reading methods or literacy course. The modification of assessment and instruction for the resolution of reading problems in the elementary classroom.

READ 5460 - Content Literacy
3 credit hours Emphasis on teaching reading in content subjects such as mathematics, science, and social studies in upper elementary, middle school, and secondary schools. Specific suggestions for activities and lesson strategies included. (Available on permission-of-department basis only.)

READ 6000 - Foundations of Literacy
3 credit hours Prerequisite: A reading methods or literacy course. Planning and developing a reading program through extensive reading in the field and seminar participation. Special emphasis on the reading process.

READ 6120 - Current Issues in Literacy Instruction
1 to 3 credit hours Specific issues and trends affecting reading instruction in today's classrooms. Repeatable up to three hours of various topics.

READ 6520 - Teaching Reading
3 credit hours Prerequisites: Admission to the teacher education program; ELED 6500 and ELED 6510 may be taken concurrently. Introduces students to the various philosophies for teaching reading in the K-6 classroom and to a variety of instructional strategies for teaching reading.

READ 6710 - Adolescent Literacy
3 credit hours Approaches to effective literacy enhancement in middle and secondary school programs. Suggestions for meeting the literacy needs of typical and atypical adolescent literacy learners.

READ 6720 - Instructional Tools in Literacy
3 credit hours Prerequisite: READ 6000 or permission of instructor. Formal and informal tools to document and define a reading difficulty as well as approaches/strategies to overcome such difficulties.

READ 6730 - Curriculum and Supervision of Literacy Instruction
3 credit hours The role of the reading specialist. Focuses on preparing reading specialists to work with students and adults in school settings. Planning in-service presentations, grant writing, critiquing materials, and effective reading programs explored.

READ 6750 - Research in Literacy
3 credit hours Prerequisite: READ 6000, its equivalent, or permission of the instructor. An investigation of significant research related to reading with emphasis on classroom practices, group analysis, and individual study. (Available on permission-of-department basis only.)

READ 6760 - Early Literacy
3 credit hours A methods course that concentrates on beginning reading and emergent literacy issues in developing reading and writing.

READ 6790 - Literacy Practicum
3 to 6 credit hours Prerequisite: READ 6720 or equivalent. A supervised practice in teaching children with various types of reading and learning problems. Student may enroll for 3 hours credit or 6 hours credit in a single semester. May be repeated for up to 6 credits; however, only 3 credits may apply toward the degree.

READ 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate

advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Special Education

SPED 5240 - Methods and Techniques of Behavior Management
3 credit hours Overview of various approaches to behavior management. Application of various approaches in different special education settings. Basis of evaluation of various behavior change techniques.

SPED 5260 - Problems in Special Education A-Z
1 to 3 credit hours A problem-oriented course, on or off campus, planned and designed for individuals, a school faculty, school system, or other professional groups that will provide opportunities for pre- or in-service education related to assessed needs. Not more than 6 semester hours credit in independent study (SPED 6840) and/or problems (SPED 5260) can be applied toward a degree or licensure.

SPED 5280 - Assistive Technology in Special Education
3 credit hours Introduces students to adaptive/assistive technologies. The technologies will range from low-tech to high-tech and apply to the needs of school-aged students with disabilities. Includes assessing and supporting needs through the delivery of adaptive/assistive technologies.

SPED 5300 - Advanced Applied Behavioral Interventions and Supports
3 credit hours Prerequisites: Admission to Teacher Education program; SPED 4240. The study of modifying student behavior using techniques of applied behavior analysis in a variety of educational settings. Candidates will research and discuss multiple techniques that improve behaviors in various environments. Positive reinforcement, evidence-based progress-monitoring tools, and assessment methods emphasized.

SPED 5320 - Directed Teaching in Special Education (Comprehensive)
9 credit hours Prerequisites: ELED 3150; SPED 6200, SPED 6800; full admission to Directed Teaching. A full-day, ten-week supervised teaching experience in a public classroom. Pass/Fail.

SPED 5350 - Directed Teaching in Special Education (Modified)
9 to 12 credit hours Prerequisites: ELED 3150; READ 4015 or 4035; SPED 6200 and SPED 6800; full admission to directed teaching. A full-day, ten-week supervised teaching experience in a public classroom. Pass/Fail.

SPED 5370 - Transition Education and Services for Exceptional Learners
3 credit hours Prerequisite: Admission to Special Education: Modified program or permission of department. Addresses the knowledge and skills needed to develop and implement effective transition planning from school to adult life. Offers preparation for successful transition from elementary grades, career preparation education, and eventual transition to adult life. Explores a variety of tools, supports, and classroom strategies for creating successful transitions in preparation for adult life.

SPED 5380 - Co-teaching in Inclusive Classrooms
3 credit hours Collaborative and co-teaching models and how to implement them in the inclusive classroom. Emphasizes RTI, collaborative teaching, differentiated instruction, explicit teaching, the affective domain, and accommodations and modifications. Aspects of the CSEFEL model integrated throughout the course. Students develop an understanding of differing educational theories and expand upon them to create their own educational philosophies.

SPED 5510 - Teaching Internship: Special Education
9 credit hours A supervised teaching experience. Available only to those with at least one year of paid teaching experience in the major in which endorsement is sought. Applicants must meet all prerequisites for student teaching. Pass/Fail.

SPED 6020 - Overview of Special Education
3 credit hours Theories and techniques of providing instruction to exceptional individuals. Designed for individuals without prior specialized experience and/or course work in special education. Not for degree credit.

SPED 6100 - Differentiation and Literacy: Teaching Corrective Reading and Writing
3 credit hours Prerequisite: Admission to Teacher Education program. Identifies and implements evidence-based reading interventions and strategies.

Incorporates writing deficits; how to identify students with reading disabilities, administer curriculum-based assessments, determine skill level, determine appropriate interventions, assess intervention outcomes, and adjust interventions when needed.

SPED 6300 - Theoretical Perspectives on High Incidence Disabilities
3 credit hours Reviews the various perspectives on mild/moderate disabling conditions from a historical perspective. Viability of each perspective examined. Implications of each for assessment and intervention considered.

SPED 6310 - Issues in Assessment of High Incidence Disabilities
3 credit hours Prerequisite: SPED 6300. A variety of tests and assessment tools within the various theoretical frameworks they represent. Considers the development of diagnostic batteries based on such tests. Particular attention given to the significance of the theoretical perspectives in selecting and interpreting data collected.

SPED 6330 - Theory and Instructional Practice for Students with High Incidence Disabilities
3 credit hours Prerequisite: Admission to Teacher Education program. A variety of instructional approaches within the various theoretical frameworks from which each evolved. Considers the development and evaluation of IEPs through an integration of learner characteristics, instructional approaches, and educational needs.

SPED 6350 - Residency: Directed Clinical Teaching
3 to 9 credit hours Supports and supplements supervised student teaching in a special education resource setting. Directed clinical teaching experience using socratic seminars, reflection, case studies, presentations, classroom observations, discussions, and discourse analysis. Discusses requirements of the edTPA. Candidates will receive support from seminar instructor, cooperating teacher, and supervisor during the student teaching and seminar experience. Candidates will be placed in a full day, 12-15 week supervised teaching experience in a public classroom. Pass/Fail.

SPED 6410 - Characteristics and Teaching of Learners with Low Incidence Disabilities
3 credit hours In-depth survey for professionals who will work with school age students who receive services in Special Education in one or more of the categories characterized as low incidence. Emphasis on cognitive, motor, social, communicative, behavioral, and physical characteristics of this population. Advanced methods and techniques for instructing low incidence populations.

SPED 6600 - Advanced Math Strategies for High Incidence Disabilities
3 credit hours Prerequisite: Admission to Teacher Education program. How to identify and implement evidence-based math interventions and strategies in both skill-based and inclusive settings. How to identify math disabilities, conduct curriculum-based math assessments, determine appropriate math interventions, assess the intervention outcomes, and adjust the interventions needed.

SPED 6650 - Data, Analytics, and Adaptive Learning
3 credit hours Prerequisite: Admission to Teacher Education program. Evidence-based interventions and strategies and how to incorporate them into inclusive and skill-based settings. Evaluate research to identify evidence-based practice, implement that practice in daily teaching strategies, and keep current on emerging research studies that evaluate evidence-based strategies for teaching individuals with disabilities. The importance of analyzing outcomes of specific strategies or interventions and adjusting certain aspects in order to best individualize the learning of each student.

SPED 6700 - Introduction to Autism Spectrum Disorders
3 credit hours In-depth survey of students with Autism Spectrum Disorders. Focus on promoting learning and collaborative problem-solving approaches that facilitate effective family-professional partnerships and educational programming for this population.

SPED 6710 - Action Research in Special Education
3 credit hours Presents skills necessary to conduct classroom research for the purpose of improving learning opportunities for diverse learners.

SPED 6720 - Promoting Family-Professional Partnerships in Special Education
3 credit hours Understanding the concerns and needs of parents of children who have special needs.

Also presents strategies and techniques for working effectively with parents.

SPED 6730 - Methods of Instruction for Students with Autism Spectrum Disorders
3 credit hours Prerequisite: SPED 6700. Overview of methods of instruction for students with Autism Spectrum Disorders. Emphasis on instructional content in a variety of settings. Focuses on evaluation of instructional progress and how the teacher plays an active role in skill acquisition and development.

SPED 6780 - School Law and Policy: Special Education Issues
3 credit hours An intensive study of the legislation and litigation involved with individuals with disabilities, specifically concentrating on those students between the ages of birth-21 years. Special education case law briefs and state and federal House and Senate bills researched and analyzed.

SPED 6800 - Exceptional Children and Youth
3 credit hours Prerequisite: Admission to graduate program or permission of department. Introduction to problems in identification, etiology, and educational treatment of mentally retarded, gifted, physically and emotionally challenged, learning disabled, and culturally disadvantaged children and youth.

SPED 6840 - Independent Study: Special Education
1 to 3 credit hours Prerequisite: Consent of the advisor. Enables students to develop and conduct a study based on individual professional interests. No more than 6 semester hours credit in Independent Study (SPED 6840) and/or Problems (SPED 5260) can be applied toward a degree or licensure.

SPED 6860 - Characteristics and Needs of the Gifted Child
3 credit hours Characteristics, needs, psychological and educational considerations, and identification procedure for gifted children.

SPED 6880 - Educational Procedures in the Education of the Gifted
3 credit hours Prerequisite: SPED 6860. Reviews various theoretical models of learning and teaching that are most often used in developing curriculum for the gifted learner. Application of the models is stressed.

SPED 6900 - Characteristics of Young Children with Disabilities
3 credit hours Provides an in-depth study of the development of young children ages birth-8 with developmental delays and disabilities. Developmental and family theories will be discussed. An overview of legislation, models, and approaches for supporting young children with developmental delays and disabilities discussed.

SPED 6910 - Developmental Assessment
3 credit hours Prerequisite: Admission to graduate program or permission of department. Evaluative and diagnostic instruments, environmental assessments, and other procedures used with very young and/or multiple disabled individuals.

SPED 6920 - Field Work in Early Childhood Special Education (School Settings)
3 credit hours Prerequisites SPED 6900 SPED 6930. Practicum experience in settings serving preschoolers and/or K-3 students with diagnosed disabilities or developmental delays. Students will spend 60 hours in a school-based early childhood setting supporting young children with disabilities.

SPED 6930 - Instructional Strategies for Supporting Young Children with Disabilities
3 credit hours Current theories, practices, and procedures used to develop programs for preschool children who are developmentally delayed (ages birth to 5 years).

SPED 6950 - Field Work in Home and Community-Based Settings
3 credit hours Prerequisites: SPED 6900, SPED 6930, and ECE 6350. Practicum experience in home- and community-based settings serving young children who have developmental delays. Students will spend 60 hours in the home and community-based setting(s).

SPED 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

College of Liberal Arts

Liberal Arts, M.A.

Dr. Janet McCormick, Program Director
(615) 494-8801
mala@mtsu.edu
The College of Liberal Arts offers the Master of Arts in Liberal Arts, an interdisciplinary program offering a thesis and non-thesis option.
The Master of Arts in Liberal Arts (MALA), a broadly interdisciplinary program, allows students to construct a personal plan of study from within the College of Liberal Arts graduate programs. With the guidance of the program director, students build a program of study that will enhance career opportunities, provide preparation for further graduate study, or create opportunities for lifelong learning.

Admission Requirements

To be admitted to the Master of Arts in Liberal Arts, applicant must have an earned bachelor's degree from an accredited university or college.
Admission decisions are made after a holistic review of all admission materials and are based on the program's judgment of the applicant's capacity, suitability, and preparation for graduate study. The admissions committee reserves the right to request references and/or an interview.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit a current resume or vitae;
3. submit a 500-word statement of purpose outlining academic interests and goals;
4. submit two letters of recommendation from professors, supervisors, or others familiar with qualifications to address applicant's potential to successfully complete the M.A. in Liberal Arts program;
5. submit official transcripts of all previous college work.

Degree Requirements

The Master of Arts in Liberal Arts requires completion of 30 semester hours (non-thesis option) or 30-33 semester hours (thesis option).
Candidate must

1. complete 30 semester hours (non-thesis) or 30-33 (thesis); no more than 30 percent of the total degree hours dual-listed as 5000-level undergraduate/graduate hours can be counted toward the degree;
2. successfully complete and defend a thesis or capstone project.

Curriculum: Liberal Arts

The following illustrates the minimum coursework requirements. In addition, a maximum of 6 hours of thesis research may be required to fulfill degree requirements.

Thesis (30-33 hours)

Core (9-12 hours)

- MALA 6000 - Foundations of Liberal Arts I **3 credit hours**
- MALA 6010 - Foundations of Liberal Arts II **3 credit hours**
- MALA 6640 - Thesis Research **1 to 6 credit hours (3-6 credit hours)**

Areas (9 hours)

- MALA 6030 - Topics in Culture and Ideas **3 credit hours**
- MALA 6040 - Topics in Society and People **3 credit hours**
- MALA 6050 - Topics in Science and Reason **3 credit hours**

Guided Electives (12 hours)

Choose from additional MALA topics courses and electives or courses in other College of Liberal Arts graduate programs as approved by the director. (Student may take up to 9 credit hours of guided electives at the 5000 level.)

Non-thesis Option (30 hours)

Core (9 hours)

- MALA 6000 - Foundations of Liberal Arts I **3 credit hours**
- MALA 6010 - Foundations of Liberal Arts II **3 credit hours**
- MALA 6020 - Capstone Project **3 credit hours**

Areas (9 hours)

- MALA 6030 - Topics in Culture and Ideas **3 credit hours**
- MALA 6040 - Topics in Society and People **3 credit hours**
- MALA 6050 - Topics in Science and Reason **3 credit hours**

Guided Electives (12 hours)

Choose from additional MALA topics courses and electives or courses in other College of Liberal Arts graduate programs as approved by the director. (Student may take up to 9 credit hours of guided electives at the 5000 level.)

Master in Liberal Arts

MALA 6000 - Foundations of Liberal Arts I
3 credit hours A study of the traditional disciplines belonging to the liberal arts found in the departments of Art and Design, Communication Studies, English, History, and World Languages, Literatures, and Cultures. Focuses on the foundations and development of these disciplines with particular emphasis on content, research methods, literature search, and analysis.

MALA 6010 - Foundations of Liberal Arts II
3 credit hours A study of the traditional disciplines belonging to the liberal arts and found in the departments of Global Studies and Human Geography, Philosophy and Religious Studies, Political Science and International Relations, Theatre and Dance, and Sociology and Anthropology and the School of Music. Focuses on the foundations and development of these disciplines with particular emphasis on content, research methods, literature search, and analysis.

MALA 6020 - Capstone Project
3 credit hours Selection of an interdisciplinary topic, advanced research including the review of applicable literature, and completion of a final product such as a paper; a creative, visual, or digital presentation; or some other format approved by the course instructor.

MALA 6030 - Topics in Culture and Ideas
3 credit hours Focuses on the traditions of the humanities as reflected in literature and languages, art and music, historical and philosophical questions, and religious thought.

MALA 6040 - Topics in Society and People
3 credit hours Focuses on the structural and political entities in societies of the past and present. Reflects people's efforts at making connections, resolving conflict, and creating identity.

MALA 6050 - Topics in Science and Reason
3 credit hours Focuses on the contributions of the sciences to liberal arts through interdisciplinary study and changes in ways of thinking about ourselves and the world around us.

MALA 6060 - Liberal Arts Abroad
1 to 6 credit hours Students will study topics within the liberal arts while traveling in countries outside of the United States as a part of an Education Abroad program.

MALA 6070 - Focused Study in Liberal Arts
1 to 3 credit hours Student works individually with professor on a topic or practice of interest in the liberal arts.

MALA 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion.

Art and Design

Michael Baggarly, Interim Chair
(615) 898-2455
www.mtsu.edu/art/
The Art and Design Department offers a graduate-level Art minor.

Art Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Art

ART 5000 - Workshop
1 to 3 credit hours Prerequisite: Permission of instructor. Subject matter as well as credit to be determined by the instructor. May be conducted in the area of art, art education, or any art discipline. (A maximum of nine credits may be applied toward a degree.) Three-six hour studio course.

ART 5310 - Portfolio II
3 credit hours Prerequisite: ART 3330 or permission of instructor. Production of portfolio-based problems with emphasis on advanced design skills related to the specific needs of the workplace. Includes basic collateral problems, ad campaigns, corporate identity, signage, plus a self-promotional package. Six-hour studio course.

ART 5320 - Senior Project
3 credit hours Prerequisite: ART 5310 or permission of instructor. Following a portfolio review, each member of the class will devise a project that conceptually and visually addresses his or her design/illustration goals. Six-hour studio course.

ART 5330 - Internship
3 credit hours Prerequisite: ART 5320 or permission of internship coordinator. Advanced students gain practical experience in a professional setting. Approximately 150 work hours required for the semester.

ART 5500 - History and Theory of Art Therapy
3 credit hours Topics include historical and current trends, therapeutic techniques, and the basic concepts of ethics and professional practice in art therapy.

ART 5510 - Sculpture IV
3 credit hours Prerequisite: ART 3530 or permission of instructor. Development of concepts and techniques with primary emphasis on metal sculpture. Experiences include gas and electric welding, fabricating, grinding, finishing, and subordinate use of other sculpture materials. Six-hour studio course.

ART 5520 - Sculpture V
3 credit hours Prerequisite: ART 5510 or permission of instructor. Development of concepts and techniques with primary emphasis on casting activities in the foundry covering various metal casting techniques and subordinate use of other sculpture materials. Six-hour studio course.

ART 5530 - Sculpture VI
3 credit hours Prerequisite: ART 5520 or permission of instructor. Problems in sculpture acceptable to both student and instructor, selected by the student after consultation with instructor. Six-hour studio course.

ART 5550 - Art Therapy Ethics and Professional Issues
3 credit hours Covers the fundamentals of clinical ethics and professional practice in art therapy. Focuses on board licensure and certification.

ART 5600 - Art Therapy Studio
3 credit hours Applied studio course that requires students to investigate models of creativity, symbolism, metaphor, and the artistic process.

ART 5640 - Advanced Art Problems
1 to 3 credit hours Prerequisite: Permission of instructor. Structure and content determined by the Art faculty on the basis of individual need. Student should be prepared to do independent research and experimentation in the area selected. Arrangements must be made prior to registration for acceptance to proper assignment of course credit. (A maximum of nine credits may be applied toward a degree.) Three-six hour studio course.

ART 5680 - Individual Problems in Drawing
3 credit hours Prerequisite: 12 semester hours of previous drawing credit or permission of instructor. Advanced-level course with the content determined in advance through consultation with the instructor. Six-hour studio course.

ART 5710 - Painting IV
3 credit hours Prerequisite: Permission of instructor. Projects in painting; content of the course planned by student under supervision of instructor. Final paper required. Six-hour studio course.

ART 5720 - Painting V
3 credit hours Prerequisite: ART 5710 or permission of instructor. Independent studies course in painting which continues concerns of Painting IV. Six-hour studio course.

ART 5730 - Painting VI
3 credit hours Prerequisite: ART 5720 or permission of instructor. Independent studies course in painting

which continues concerns of Painting IV. Final paper required. Six-hour studio course.

ART 5800 - Art Therapy Advanced Studio Methods, Materials, and Techniques
3 credit hours Prerequisite: ART 5600 with C or better. Explores art therapy techniques and applications directly through hands-on experiences with a range of media.

ART 5810 - Intermediate Clay II
3 credit hours Prerequisite: ART 3820 or permission of instructor. Laboratory research and testing of ceramic materials, formulation of glazes and clay bodies, development of a glaze and a clay body. Six-hour studio course.

ART 5820 - Advanced Clay
3 credit hours Prerequisite: ART 3830 or permission of instructor. Studio experiences in design and construction of sculptural clay forms. Forming methods and decorative techniques explored. Six-hour studio course.

ART 5830 - Advanced Study in Clay
3 credit hours Prerequisite: ART 4820/ART 5820 or permission of instructor. Directed individual study of a problem mutually agreed upon by the student and course instructor. Written paper and exhibit required. Six-hour studio course.

ART 5900 - Nineteenth- and Twentieth-Century Art
3 credit hours Western visual art movements and trends ca. 1750-ca. 1950, focusing on European painting and sculpture with periodic explorations of non-European and non-Western traditions for perspective.

ART 5920 - Contemporary Art
3 credit hours Contemporary Western visual art movements and issues ca. 1945 to present, focusing on American painting and sculpture with periodic explorations of other traditions for perspective.

ART 5940 - Studies in Art History
3 credit hours Content varies. When offered, particular topics addressed are indicated by the course title in the class schedule book. Depending on the nature of the material to be covered, prerequisites may be imposed by the instructor. Can be repeated for up to 9 hours.

ART 5960 - Independent Studies in Art History
3 credit hours Investigations into art history under the direction of a member of the art history faculty. Topic(s) of investigation must be agreed upon by both student and instructor based on discussions prior to registering for this course. Can be repeated for up to 9 hours.

ART 6000 - Art Therapy Practicum
3 credit hours Prerequisite: Program approval. Seminar and field placement course that provides supervised clinical experience in art therapy.

ART 6001 - Group Art Therapy
3 credit hours Prerequisite: ART 5500 with a C or better. Focuses on the study of theory and practice of group art therapy.

ART 6100 - Assessment and Integrating Creative Approaches in Treatment
3 credit hours Prerequisite: ART 5600 with C or better. Examines art therapy assessment tools and strategies, documentation and presentation of case work, how to engage clients artistically, and how to carry out treatment objectives.

ART 6200 - Foundations of Art Education
3 credit hours Prerequisites: Permission of department. Historical development, philosophy, purposes, and value of art education that shaped the structures of public and private schooling in art.

ART 6220 - Problems, Issues, and Trends in Art Education
3 credit hours Prerequisite: Permission of department. Problems, trends, and issues, including diversity, within contemporary art education. Overview of instructional technologies. Examines the teacher/educator as a professional.

ART 6240 - Independent Project in Art Education
3 credit hours Prerequisites: Permission of department and completion of ART 6200 and ART 6220. Independent research-based course in which the student, with professorial approval, will complete a research project exploring a specific area of interest within art education.

ART 6250 - Metaphor and Symbolism in Art Therapy
3 credit hours Prerequisite: ART 5500, ART 5600, or ART 6100 with C or better. Examines developmental

levels, behavior, metaphor and the use of symbols as they appear in the artwork.

ART 6300 - Art Therapy Clinical Internship I
3 credit hours Prerequisite: Program approval. Supervised art therapy internship (400 hours).

ART 6350 - Art Therapy Clinical Internship II
3 credit hours Prerequisite: Program approval. Supervised art therapy internship (400 hours).

ART 6400 - Culminating Experience in Art Therapy
3 credit hours Prerequisite: Program approval; must be taken concurrently with or following ART 6350. Students will integrate theory, research, and artistic practice to develop a thesis relating to the population with whom they worked in ART 6350.

Communication Studies

Mary Beth Asbury, Interim Chair

Courses in the Department of Communication Studies are designed to hone critical thinking skills, promote effective communication, and prepare students for careers in a wide variety of careers.

Communication (Speech)

COMM 5210 - Argumentation
3 credit hours The theory and practice of advocacy speaking with emphasis on organization, refutation, reasoning, and rebuttal. In-class debating on questions of fact, value, and policy.

COMM 5230 - Advanced Public Speaking
3 credit hours Prerequisite: COMM 2200 or permission of the instructor. Application of the principles of public speaking through analysis and criticism of speech structure and delivery of classroom speeches.

COMM 5240 - Organizational Communication
3 credit hours Emphasis on communication issues in contemporary organizations and ways and means of resolving.

COMM 5260 - Readings in Speech Communications
3 credit hours Prerequisite: Permission of instructor. Intensive work in a specific area of speech communication; topic is chosen in instructor-student conference.

COMM 5320 - Theories of Persuasive Communication
3 credit hours Recent writing and research on theories of oral persuasion and on current practices of persuasion. Emphasis on the ethical, critical, cultural, and functional implications in contemporary persuasion theory and practice.

COMM 5560 - Intercultural Communication
3 credit hours Dynamics of the communication process as it functions in intercultural contexts; training for successful cross-cultural communication interactions.

COMM 5710 - Senior Seminar in Speech Communication
3 credit hours Intensive investigation of the major research methodologies in speech communication, presentation of projects, and a synthesis of the speech communication discipline.

COMM 5800 - Special Topics in Speech Communication
1 to 3 credit hours Designed to meet individual and group needs for advanced study in speech communication. Topic to be determined at time of scheduling. A maximum of six semester hours may be applied toward a degree.

COMM 6650 - Conflict Management and Resolution
3 credit hours
Explores the role of communication in conflict management/resolution between or among individuals or groups. Potential topics may include interpersonal and workplace conflict, tools for conflict resolution, including mediation and negotiation.

English

Stephen E. Severn, Chair
(615) 898-2573
www.mtsu.edu/english/
The Department of English offers the Master of Arts and the Doctor of Philosophy.

English, M.A.

Rhonda L. McDaniel, Program Director
(615) 898-5285
Rhonda.McDaniel@mtsu.edu
The Department of English offers the Master of Arts and the Doctor of Philosophy.
Graduate study in English is primarily an engagement in the deep and intense study of literature and language, theory, and writing, undertaken for the special pleasure in knowledge and understanding of the world and its semiotic systems that such studies bring. It also provides preparation and training for careers within and without the academy.
The Master of Arts in English curriculum allows students to explore standard areas of literary study (British, American, and Anglophone) as well as topics related to Composition and Rhetoric, Film Studies, Folklore, Linguistics, and Children's and Young Adult Literature. The courses are designed as seminars, and graduate students may expect highly individualized mentoring from the graduate faculty.
Please see the undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Candidates will be expected to have earned 15 hours of coursework at the 2000 level or above in English or in related fields when that coursework includes a significant component of literature or writing.
Admissions decisions are based on the department's judgment of the applicant's capacity, suitability, and preparation for graduate study. Admission to graduate study is not automatically guaranteed by meeting minimum admission requirements.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Those seeking teaching assistantships must apply by February 1 for the following Fall semester. All other applications for Summer/Fall admission must be complete by March 1. Applications for Spring admission must be complete by October 1. All application materials, including the assistantship application, should be submitted directly to the College of Graduate Studies through the Graduate Student Portal at **www.mtsu.edu/graduate/apply.php**.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.A. program in English;
3. submit official transcripts of all previous college work;
4. submit a writing example of 2,000 to 5,000 words;
5. submit a 500-word statement of purpose outlining academic interests and professional goals.

Degree Requirements

The Master of Arts in English requires completion of a minimum of 30 semester hours (thesis) or 33 semester hours (directed portfolio).
Candidate must

1. successfully complete a directed portfolio (ENGL 6913) if in the non-thesis option;
2. successfully complete and defend a thesis (ENGL 6640) if in the thesis option.

Curriculum: English

All students are required to take ENGL 6001. Depending on interests, students may choose guided course recommendations in literary studies, language and writing studies, teaching writing and literature, or popular culture/culture studies, or pursue a self-directed selection of courses. Students should consult with the graduate program advisor to select courses suitable for their interests.
The following illustrates the minimum coursework requirements. In addition, a maximum of 10 hours of thesis research may be required to fulfill degree requirements for the thesis option.

Thesis Option (30-37 hours)

- ENGL 6001 - Introduction to Graduate Study: Bibliography and Research **3 credit hours**
- ENGL 6640 - Thesis Research **1 to 6 credit hours (3 credit hours required; 10 credit hours maximum)**
- Advisor-approved electives **24 credit hours**

Non-thesis Option (33 hours)

- ENGL 6001 - Introduction to Graduate Study: Bibliography and Research **3 credit hours**
- ENGL 6913 - Directed Portfolio **1 to 6 credit hours (3 credit hours required)**
- Advisor-approved electives **27 credit hours**

Graduate Assistant Requirements

Graduate teaching assistants are required to take ENGL 6821 - Seminar in Teaching Composition in their first year of the program.

English, Ph.D.

Rhonda L. McDaniel, Program Director
(615) 898-5285
Rhonda.McDaniel@mtsu.edu
The Department of English offers the Master of Arts and the Doctor of Philosophy.
Graduate study in English is primarily an engagement in the deep and intense study of literature and language, theory, and writing, undertaken for the special pleasure in knowledge and understanding of the world and its semiotic systems that such studies bring. It also provides preparation and training for careers within and without the academy.
The Ph.D. in English offers a program that promotes the kind of dual specializations that provide breadth of knowledge and are often sought in academic employment. Student may seek specializations in the fields of American Literature; Anglophone Literature; British Literature; Children's and Young Adult Literature; Composition and Rhetoric; Critical Theory; Film Studies; and Popular Culture. Courses are designed as seminars, and graduate students may expect highly individualized attention from the graduate faculty.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admissions decisions are based on the department's judgment of the applicant's capacity, suitability, and preparation for graduate study. Admission to graduate study is not automatically guaranteed by meeting minimum admission requirements.
Candidates will be expected to have earned an M.A. degree in English or closely-related field.
Students in the Ph.D. program who have earned an M.A. in English at MTSU may apply up to 12 hours of course credit from the M.A. program toward the Ph.D. program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Those seeking teaching assistantships must apply by February 1 for the following Fall semester. All other applications for Summer/Fall admission must be complete by March 1. Applications for Spring admission must be complete by October 1. Those seeking teaching assistantships must apply by February 1 for the following Fall semester. All application materials, including the assistantship application, should be sent directly to the College of Graduate Studies through **www.mtsu.edu/graduate/apply.php**.
Applicant must

1. submit an application with the appropriate application fee online (**www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete a Ph.D. program in English;
3. submit official scores on the Graduate Record Examination (GRE) (English subject test optional);
4. submit official transcripts of all previous college work;
5. submit a writing sample of 3,000 to 5,000 words;
6. submit a 500-word statement of purpose outlining academic interests and professional goals.

Degree Requirements

The Doctor of Philosophy in English requires completion of 60-69 semester hours.
Candidate must

1. demonstrate a reading knowledge of one foreign language. (Committees may require more than one language.) ***(*NOTE: *The requirement may be waived for students whose native language is not English.)*** The language requirement must be fulfilled in one of the following ways:

    a. completing two 3-hour foreign language courses of 3000- or 4000-level work emphasizing reading, translation, or composition;
    b. earning a final grade of A or B in a foreign language course numbered 5990 or in SPAN 5920;
    c. passing a reading examination administered by the World Languages, Literatures, and Cultures Department;
    d. earning a final grade of B or better in both ENGL 7011 - Old English Language and Literature and ENGL 7015 - Beowulf, which must be taken sequentially; or
    e. meeting this requirement at the M.A. level.
2. near the completion of coursework, successfully complete two written Ph.D. exams in chosen concentrations from among the following areas: Old and Middle English Literature; Early Modern British Literature (1500-Milton); Restoration and 18th Century British Literature; Long 19th Century British Literature (1770-1900): 20th Century and Contemporary British Literature; Early American Literature (through 1900); 20th Century and Contemporary American Literature; Anglophone Literature; Children's and Young Adult Literature; Composition and Rhetoric; Popular Culture and Film; Criticism and Critical Theory; Folklore; Linguistics; or a student-researched custom area. An oral component to the exam may be required upon the successful completion of each written component.
3. complete a dissertation (12 hours minimum) and oral dissertation defense.

Curriculum: English

The following illustrates the minimum coursework requirements. In addition, a maximum of 21 hours of dissertation research may be required to fulfill degree requirements.

Core Courses (6 hours)

- ENGL 6001 - Introduction to Graduate Study: Bibliography and Research **3 credit hours** OR
- ENGL 7001 - Introduction to Graduate Study: Bibliography and Research **3 credit hours**

- ENGL 7701 - History of Criticism **3 credit hours** OR
- ENGL 7705 - Contemporary Critical Theory **3 credit hours**

One course from each of the following groups (9 hours)

British Literature through the Renaissance

- ENGL 7011 - Old English Language and Literature **3 credit hours**
- ENGL 7015 - Beowulf **3 credit hours**
- ENGL 7025 - Chaucer Seminar **3 credit hours**
- ENGL 7021 - Middle English Language and Literature **3 credit hours**
- ENGL 7051 - Studies in Early English Drama, Excluding Shakespeare: 900-1642 **3 credit hours**
- ENGL 7105 - Spenser Seminar **3 credit hours**
- ENGL 7101 - Studies in Sixteenth-Century English Prose and Poetry **3 credit hours**
- ENGL 7111 - Studies in Seventeenth-Century English Prose and Poetry **3 credit hours**
- ENGL 7121 - Studies in Milton **3 credit hours**
- ENGL 7115 - Studies in Shakespeare **3 credit hours**

Other courses when appropriate:

- ENGL 7171 - Major British Writers **3 credit hours**
- ENGL 7415 - Special Topics in Women's Literature **3 credit hours**
- ENGL 7611 - Special Topics in Language and Literature **3 credit hours**
- ENGL 7901 - Directed Reading and Research **3 credit hours**

British Literature since the Renaissance

- ENGL 7131 - Studies in Restoration and Eighteenth-Century Literature **3 credit hours**
- ENGL 7141 - Studies in English Romanticism: Wordsworth and Coleridge **3 credit hours**
- ENGL 7145 - Studies in English Romanticism: Shelley, Byron, and Keats **3 credit hours**
- ENGL 7151 - Studies in Victorian Literature **3 credit hours**
- ENGL 7161 - Modern British Literature **3 credit hours**

Other courses when appropriate:

- ENGL 7171 - Major British Writers **3 credit hours**
- ENGL 7415 - Special Topics in Women's Literature **3 credit hours**
- ENGL 7601 - Studies in the Novel **3 credit hours**
- ENGL 7611 - Special Topics in Language and Literature **3 credit hours**
- ENGL 7901 - Directed Reading and Research **3 credit hours**

American Literature

- ENGL 7221 - African American Literature **3 credit hours**
- ENGL 7225 - Studies in Southern Literature **3 credit hours**
- ENGL 7201 - Studies in American Literature to 1800 **3 credit hours**
- ENGL 7205 - Studies in American Literature: 1800-1860 **3 credit hours**
- ENGL 7211 - Studies in American Literature: 1860-1910 **3 credit hours**
- ENGL 7215 - Studies in American Literature: 1910-1950 **3 credit hours**
- ENGL 7401 - Studies in Contemporary Literature **3 credit hours**

Other courses when appropriate:

- ENGL 7231 - Major American Writers **3 credit hours**
- ENGL 7415 - Special Topics in Women's Literature **3 credit hours**
- ENGL 7601 - Studies in the Novel **3 credit hours**
- ENGL 7611 - Special Topics in Language and Literature **3 credit hours**
- ENGL 7901 - Directed Reading and Research **3 credit hours**

Electives (33 hours)

- ENGL 7909 - Doctoral Readings **3 credit hours (recommended)**
- May be chosen from the above courses or any other English graduate courses to complete the required number of hours.

Cognate Option (6-9 hours)

The cognate option in the Ph.D. degree plan allows doctoral students to take graduate-level courses (6000 and 7000 level) in other disciplines related to their areas of concentration or professional goals that would apply as electives toward the degree in English. The cognate option is limited to a minimum of six (6) hours and a maximum of nine (9)

hours. Courses taken in other departments beyond the nine hours for the cognate may not apply toward the Ph.D. in English, even as elective hours. Likewise courses taken outside the department by students who have not declared a cognate or received permission of the graduate advisor or program director will not count as credits toward the degree.

Dissertation (12-21 hours)

- ENGL 7640 - Dissertation Research **1 to 6 credit hours (12 hours minimum)**

Graduate Assistant Requirements

Graduate teaching assistants are required to take ENGL 7821 in their first year of the program.

Program Notes

Candidate must file an approved Advisory Committee form listing the members of the candidate's doctoral committee with the Graduate Office and College of Graduate Studies upon successful completion of the written and oral preliminary examination.

English

ENGL 5510 - Modern English Grammar and Usage
3 credit hours Historical development of the theory and practice of modern English grammar and usage.

ENGL 5530 - History of the English Language
3 credit hours Traces the development of the English language from cuneiform writing systems and Semitic and Phoenician syllabaries through Greek and Latin contributions, Old and Middle English, and Modern English.

ENGL 5540 - Approaches to Teaching ESL Grammar and Writing
3 credit hours Prerequisite: ENGL 4510/ENGL 5510. A survey of the background and basic methods needed to teach English grammar and composition to students for whom English is a second language. Emphasizes understanding the problems nonnative speakers face and developing techniques for helping nonnative speakers express themselves in written English.

ENGL 6001 - Introduction to Graduate Study: Bibliography and Research
3 credit hours Scholarship and professionalism in the various fields of English: the nature, scope, and ethics of professional pursuits; traditional and innovative methods; the definition and solution of research problems; the production of scholarship in literature, language, and rhetoric and composition. Required of all master's students enrolling in English.

ENGL 6011 - Old English Language and Literature
3 credit hours Introduction to Old English language (grammar, phonology, syntax, and vocabulary) and literature (poetry and prose) and to the historical and cultural background of the Anglo-Saxon period.

ENGL 6015 - Beowulf
3 credit hours Prerequisite: ENGL 6011. Intensive line-by-line study of **Beowulf** in Old English, with special emphasis on its sources and analogues, significant criticism, and current dating studies of the poem.

ENGL 6021 - Middle English Language and Literature
3 credit hours A study of Middle English literary types (in poetry, prose, and drama) and of the major authors and texts of the Middle English period. Includes study of Middle English dialects.

ENGL 6025 - Chaucer Seminar
3 credit hours Close study of Chaucer's major and minor works in Middle English, with attention to Chaucer's historical and cultural context (including his sources) and to significant scholarly criticism.

ENGL 6051 - Studies in Early English Drama, Excluding Shakespeare: 990-1642
3 credit hours Advanced study of the origin and development of English drama, emphasizing Elizabethan and Jacobean drama and the contributions of Shakespeare's contemporaries and successors.

ENGL 6101 - Studies in Sixteenth-Century English Prose and Poetry
3 credit hours Considers works of prose, fiction, romance, and poetry of the sixteenth-century to investigate changing vocabularies, genres, and literary practices that emerge in the Renaissance in response to various cultural, social, and historical pressures.

ENGL 6105 - Spenser Seminar
3 credit hours Seeks to develop an understanding of individual works in Edmund Spenser's oeuvre and some sense of their place in the larger cultural systems of the sixteenth century. Philosophical meditations, pastoral eclogues, shorter poems are engaged fully to consider Spenser's range and engagement with lyric forms, as well as complete study of his major work, ***The Faerie Queene***.

ENGL 6111 - Studies in Seventeenth-Century English Prose and Poetry
3 credit hours Selected nondramatic literature of the century, with primary emphasis on the seventeenth century before the Restoration. Included are Donne, Herbert, and the metaphysical poets and Jonson and the Cavalier poets.

ENGL 6115 - Studies in Shakespeare
3 credit hours Advanced study of Shakespeare's poems and plays, emphasizing poetic and dramatic techniques in his works and critical reaction to those works.

ENGL 6121 - Studies in Milton
3 credit hours The major poetry of John Milton, including "Lycidas," ***Paradise Lost***, ***Samson Agonistes***, and ***Paradise Regained***.

ENGL 6131 - Studies in Restoration and Eighteenth-Century Literature
3 credit hours Designed to give students a definite critical knowledge of the major literary works of Restoration and eighteenth-century England, 1660-1800. Course may focus on either drama, poetry, or prose or a combination.

ENGL 6141 - Studies in English Romanticism: Wordsworth and Coleridge
3 credit hours Covers the major lyrical and narrative poetry of Wordsworth and Coleridge as well as select prose, e.g., Wordsworth's Preface to the second edition of ***Lyrical Ballads*** and Coleridge's ***Biographia Literaria***.

ENGL 6145 - Studies in English Romanticism: Shelley, Byron, and Keats
3 credit hours Covers the major lyrical, narrative, and dramatic poetry of the three principal younger generation Romantics as well as select prose, e.g., Shelley's ***A Defence of Poetry*** and Keats's letters.

ENGL 6151 - Studies in Victorian Literature
3 credit hours Intellectual backgrounds of the Victorian period; major prose writers: Macaulay, Carlyle, Newman, Mill, Ruskin, Arnold, Pater; major poets: Tennyson, Browning, Arnold.

ENGL 6161 - Modern British Literature
3 credit hours Intellectual backgrounds of modern British literature; major novelists: Forster, Woolf, Joyce, Lawrence; major poets: Yeats, Eliot, Auden, Thomas; selected minor writers.

ENGL 6171 - Major British Writers
3 credit hours An in-depth study of one, two, or three British writers. Course varies according to interests of instructor and students. May be taken for multiple credit up to 6 hours.

ENGL 6201 - Studies in American Literature to 1800
3 credit hours Surveys literature associated with the discovery and colonization of America from the first recorded European encounters with the New World until just after the founding of the United States. The readings represent a rich variety of genres (reports, letters, poetry, histories, journals/diaries, autobiographies, sermons, novels, slave/captivity narratives, trickster tales, drama, etc.) in accordance with the broad definition of literature characteristic of the period.

ENGL 6205 - Studies in American Literature: 1800-1860
3 credit hours Surveys literature associated with the Romantic period in American literary history, from the beginning of the nineteenth century through the 1860's. Writing across a variety of genres including essays, short stories, poetry, novels, and slave narratives. Authors of this era answered the calls that had been made since the nation was founded for an artistically sophisticated and distinctive national literature.

ENGL 6211 - Studies in American Literature: 1860-1910
3 credit hours Covers the development of American literature from roughly the Civil War to World War I, including the rise of realism, naturalism, regionalism, and local color. Considers historical and cultural contexts.

ENGL 6215 - Studies in American Literature: 1910-1950
3 credit hours Covers the rise of American modernism, including experiments in fiction, drama, and verse; considers the phenomenon of expatriation, the radical visions of the depression decade, and the literary experience of the two world wars.

ENGL 6221 - African American Literature
3 credit hours An in-depth study of the African American literary tradition with emphasis on significant authors, genres, texts, and contexts.

ENGL 6225 - Studies in Southern Literature
3 credit hours Themes, theories, movements, and types of literature produced in the American South with particular emphasis on selected authors and texts.

ENGL 6231 - Major American Writers
3 credit hours An in-depth study of two or three American writers. Course varies according to interests of instructor and students. May be taken for multiple credit up to 6 hours.

ENGL 6301 - Postcolonial Literature and Theory
3 credit hours Introduces postcolonial studies through an exploration of seminal literary and critical writings in the field. Primary focus on the critical thought and discursive practices that define postcolonial discourse and their application to literature that engages issues of colonialism, its aftermath, and other forms of imperialism.

ENGL 6401 - Studies in Contemporary Literature
3 credit hours Intellectual backgrounds of contemporary literature; significant developments in fiction, nonfictional prose, poetry, and drama.

ENGL 6405 - Studies in Contemporary Drama
3 credit hours The development of world drama from 1950 to the present with attention to related criticism and theory.

ENGL 6415 - Special Topics in Women's Literature
3 credit hours Study of selected women authors with a focus on the way women's voices contribute to literary discourse. Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 6511 - History of Children's Literature
3 credit hours History of British and American literature for children and analysis of issues in the field.

ENGL 6515 - Topics in Children's and Adolescent Literature
3 credit hours Selected genre, period, ethnicity, tradition, or literary focus on children's and/or young adult literature. Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 6521 - Literature for Adolescents
3 credit hours Survey of literature written for adolescents, including history, contemporary trends, and critical issues in the field.

ENGL 6551 - Popular Culture Studies
3 credit hours Major trends and significant debates in the development of popular culture theory and criticism.

ENGL 6555 - Special Topics in Popular Culture Studies
3 credit hours A theme, genre, period, text, or artist in one or more popular cultural media. Subject will vary each time the course is taught. May be taken for multiple credit up to 9 hours.

ENGL 6561 - Film Studies
3 credit hours Covers such topics as the film text, adaptation, narratology, genres, ideology, authorship, theory, history, schools, movements, national cinemas, and film audiences.

ENGL 6565 - Special Topics in Film Studies
3 credit hours Examines a theme, genre, director, period, school or movement, national cinema, etc. Subject will vary each time course is taught. May be taken for multiple credit up to 9 hours.

ENGL 6571 - Studies in Folklore
3 credit hours Study of folklore with focus on the history of the discipline.

ENGL 6575 - Special Topics in Folklore
3 credit hours Selected area of folklore: folk narrative, folklore and literature, folk song, folk religion, proverb, or folklore of a particular group. May be taken for multiple credit up to 9 hours.

ENGL 6601 - Studies in the Novel
3 credit hours The novel as a literary genre may be approached from a variety of perspectives, including generic, historical, theoretical, or single-author approaches. Course varies according to interests of instructor and students.

ENGL 6605 - Satire
3 credit hours Satire as a distinct genre, emphasizing its continuity in Western literature from antiquity to the present; representative works from four periods: ancient, medieval and Renaissance, eighteenth century, and modern; prose, poetry, and drama.

ENGL 6611 - Special Topics in Literature and Language
3 credit hours A specialized field of literary or linguistic inquiry, its bibliography, critical problems, and probable solutions. Topics vary with the professor assigned to the course. May be taken for multiple credit up to 9 hours.

ENGL 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

ENGL 6651 - Essentials of Linguistics
3 credit hours Major linguistic approaches to the study of language-dominant trends and current issues in linguistics; the phonological, morphological, and syntactic structure of the English language.

ENGL 6655 - Special Topics in the History of the English Language
3 credit hours Advanced study of various aspects of the English language from its beginnings in Proto-Indo-European to the present day (writing systems, Indo-European, phonology, morphology, syntax, lexicon, stylistics, semantics, etc.). Subject will vary with instructor.

ENGL 6701 - History of Criticism
3 credit hours Examines significant critical movements in Western literature from classical times into the twenty-first century.

ENGL 6705 - Contemporary Critical Theory
3 credit hours Covers major critical trends in literary theory since 1965, including feminist, Marxist, structuralist, and deconstructive approaches to literature. Students explore background and implications of these theories and analyze selected works of literature in light of these approaches.

ENGL 6711 - Reading Postmodernism
3 credit hours Theoretical discourse which works to define the cultural mindset known as postmodernism. Theories examined will be applied to examples of postmodern literature, film, and/or television. Topics emphasized include the instability of social and cultural categories, the dissolving boundaries between high and low culture and art, and the subversion of realist narrative strategies.

ENGL 6715 - Studies in Narratology
3 credit hours Examines modern and contemporary theories of narrative (modernist, rhetorical, structuralist, dialogical) with particular application to selected authors and texts.

ENGL 6801 - History of Rhetoric: Ancient to Renaissance
3 credit hours An examination of the major theorists and themes, including literary and pedagogical implications, from the ancient period to the Renaissance.

ENGL 6805 - History of Rhetoric: Early Modern to Contemporary
3 credit hours An examination of major theorists and themes, including literary and pedagogical implications, from early modern period to the present.

ENGL 6811 - Studies in Composition and Rhetoric
3 credit hours An introduction to the intellectual foundations of composition studies focusing on influential theories as well as the field's intellectual and disciplinary history.

ENGL 6815 - Special Topics in Composition and Rhetoric
3 credit hours Intensive examination of themes, periods, figures, and texts in composition and/or rhetoric. Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 6821 - Seminar in Teaching Composition
3 credit hours Open only to first-year teaching assistants or with consent of instructor.

ENGL 6825 - Practicum in Composition Methodology
3 credit hours In-depth study of how composition theory and research inform methodology. Topics covered vary according to interests of instructor and students.

ENGL 6851 - Writing Center Theory
3 credit hours Examines the theoretical and practical components of writing center work, including collaborative, composition, learning, writing center, and postmodern theories. Open to all graduate students.

ENGL 6861 - Middle Tennessee Writing Project (MTWP) Summer Institute
3 credit hours Reserved for invited participants in the Middle Tennessee Writing Project. Acquaints students with composition and pedagogical theories, practices for the teaching of writing, methods of research and presentation, development of writing resources including grant writing, various genres of writing and writing response, and publishing.

ENGL 6871 - Poetry Workshop
3 credit hours A rigorous writing course to develop the advanced writer's use of point-of-view, tone, rhythm, meter, line, and stanza. Practice in both the spontaneity of composition and the deliberate, disciplined work of revision. Examination, through poems and essays by relevant authors, of the movements, forms, and possibilities of contemporary poetry.

ENGL 6881 - Seminar in Teaching of Literature
3 credit hours Recommended for second-year teaching assistants and others interested in teaching literature.

ENGL 6901 - Directed Reading and Research
3 credit hours Prerequisite: Permission of the director of graduate studies. Individually supervised reading and research in an area of English. Students may apply no more than two directed reading courses toward their degree requirements.

ENGL 6905 - Directed Creative Writing
3 credit hours Prerequisite: Permission of the director of graduate studies in English. Individually supervised writing project in fiction, poetry writing, playwriting, or creative nonfiction.

ENGL 6909 - Masters' Readings
3 credit hours Prerequisite: ENGL 6001 with a grade of B or better. A student-designed course of readings constructed in consultation with faculty in preparation for writing a thesis.

ENGL 6913 - Directed Portfolio
1 to 6 credit hours Prerequisites: 27 hours of M.A. coursework and permission of the director of graduate studies. An individually supervised, unified collection of multiple components that includes intensive revision of a paper or papers from previous coursework and other elements to be determined by the portfolio director to demonstrate an appropriate breadth of knowledge and sophistication of writing. Normally 3 credit hours in one semester; may be repeated only once.

ENGL 7001 - Introduction to Graduate Study: Bibliography and Research
3 credit hours Scholarship and professionalism in the various fields of English: the nature, scope, and ethics of professional pursuits; traditional and innovative methods; the definition and solution of research problems; the production of scholarship in literature, language, and rhetoric and composition. Required of all doctoral students enrolling in English.

ENGL 7011 - Old English Language and Literature
3 credit hours Introduction to Old English language (grammar, phonology, syntax, and vocabulary) and literature (poetry and prose) and to the historical and cultural background of the Anglo-Saxon period.

ENGL 7015 - Beowulf
3 credit hours Prerequisite: ENGL 7011. Intensive line-by-line study of **Beowulf** in Old English, with special emphasis on its sources and analogues, significant criticism, and current dating studies of the poem.

ENGL 7021 - Middle English Language and Literature
3 credit hours A study of Middle English literary types (in poetry, prose, and drama) and of the major authors and texts of the Middle English period. Includes study of Middle English dialects.

ENGL 7025 - Chaucer Seminar
3 credit hours Close study of Chaucer's major and minor works in Middle English, with attention to Chaucer's historical and cultural context (including his sources) and to significant scholarly criticism.

ENGL 7051 - Studies in Early English Drama, Excluding Shakespeare: 900-1642
3 credit hours Advanced study of the origin and development of English drama, emphasizing Elizabethan and Jacobean drama and the contributions of Shakespeare's contemporaries and successors.

ENGL 7101 - Studies in Sixteenth-Century English Prose and Poetry
3 credit hours Considers works of prose, fiction, romance, and poetry of the sixteenth-century to investigate changing vocabularies, genres, and literary practices that emerge in the Renaissance in response to various cultural, social, and historical pressures.

ENGL 7105 - Spenser Seminar
3 credit hours Seeks to develop an understanding of individual works in Edmund Spenser's oeuvre and some sense of their place in the larger cultural systems of the sixteenth century. Philosophical meditations, pastoral eclogues, shorter poems are engaged fully to consider Spenser's range and engagement with lyric forms, as well as complete study of his major works, ***The Faerie Queene***.

ENGL 7111 - Studies in Seventeenth-Century English Prose and Poetry
3 credit hours Selected nondramatic literature of the century, with primary emphasis on the seventeenth century before the Restoration. Included are Donne,

Herbert, and the metaphysical poets and Jonson and the Cavalier poets.

ENGL 7115 - Studies in Shakespeare
3 credit hours Advanced study of Shakespeare's poems and plays, emphasizing poetic and dramatic techniques in his works and critical reaction to those works.

ENGL 7121 - Studies in Milton
3 credit hours The major poetry of John Milton, including "Lycidas," ***Paradise Lost***, ***Samson Agonistes***, and ***Paradise Regained***.

ENGL 7131 - Studies in Restoration and Eighteenth-Century Literature
3 credit hours Designed to give students a definite critical knowledge of the major literary works of Restoration and eighteenth-century England, 1660-1800. Course may focus on either drama, poetry, or prose or a combination.

ENGL 7141 - Studies in English Romanticism: Wordsworth and Coleridge
3 credit hours Covers the major lyrical and narrative poetry of Wordsworth and Coleridge as well as select prose, e.g., Wordsworth's Preface to the second edition of ***Lyrical Ballads*** and Coleridge's ***Biogaphia Literaria***.

ENGL 7145 - Studies in English Romanticism: Shelley, Byron, and Keats
3 credit hours Covers the major lyrical, narrative, and dramatic poetry of the three principal younger generation Romantics as well as select prose, e.g., Shelley's ***A Defence of Poetry*** and Keats's letters.

ENGL 7151 - Studies in Victorian Literature
3 credit hours Intellectual backgrounds of the Victorian period; major prose writers: Macaulay, Carlyle, Newman, Mill, Ruskin, Arnold, Pater; major poets: Tennyson, Browning, Arnold.

ENGL 7161 - Modern British Literature
3 credit hours Intellectual backgrounds of modern British literature; major novelists: Forster, Woolf, Joyce, Lawrence; major poets: Yeats, Eliot, Auden, Thomas; selected minor writers.

ENGL 7171 - Major British Writers
3 credit hours An in-depth study of one, two, or three British writers. Course varies according to interests of instructor and students. May be taken for multiple credit up to 6 hours.

ENGL 7201 - Studies in American Literature to 1800
3 credit hours Surveys literature associated with the discovery and colonization of America from the first recorded European encounters with the New World until just after the founding of the United States. The readings represent a rich variety of genres (reports, letters, poetry, histories, journals/diaries, autobiographies, sermons, novels, slave/captivity narratives, trickster tales, drama, etc.) in accordance with the broad definition of literature characteristic of the period.

ENGL 7205 - Studies in American Literature: 1800-1860
3 credit hours Surveys literature associated with the Romantic period in American literary history, from the beginning of the nineteenth century through the 1860's. Writing across a variety of genres including essays, short stories, poetry, novels, and slave narratives. Authors of this era answered the calls that had been made since the nation was founded for an artistically sophisticated and distinctive national literature.

ENGL 7211 - Studies in American Literature: 1860-1910
3 credit hours Covers the development of American literature from roughly the Civil War to World War I, including the rise of realism, naturalism, regionalism, and local color. Considers historical and cultural contexts.

ENGL 7215 - Studies in American Literature: 1910-1950
3 credit hours Covers the rise of American modernism, including experiments in fiction, drama, and verse; considers the phenomenon of expatriation, the radical visions of the depression decade, and the literary experience of the two world wars.

ENGL 7221 - African American Literature
3 credit hours An in-depth study of the African American literary tradition with emphasis on significant authors, genres, texts, and contexts.

ENGL 7225 - Studies in Southern Literature
3 credit hours Themes, theories, movements, and types of literature produced in the American South

with particular emphasis on selected authors and texts.

ENGL 7231 - Major American Writers
3 credit hours An in-depth study of one, two, or three American writers. Course varies according to interests of instructor and students. May be taken for multiple credit up to 6 hours.

ENGL 7301 - Postcolonial Literature and Theory
3 credit hours Introduces postcolonial studies through an exploration of seminal literary and critical writings in the field. Primary focus on the critical thought and discursive practices that define postcolonial discourse and their application to literature that engages issues of colonialism, its aftermath, and other forms of imperialism.

ENGL 7401 - Studies in Contemporary Literature
3 credit hours Intellectual backgrounds of contemporary literature; significant developments in fiction, nonfictional prose, poetry, and drama.

ENGL 7405 - Studies in Contemporary Drama
3 credit hours The development of world drama from 1950 to the present with attention to related criticism and theory.

ENGL 7415 - Special Topics in Women's Literature
3 credit hours Study of selected women authors with a focus on the way women's voices contribute to literary discourse. Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 7511 - History of Children's Literature
3 credit hours History of British and American literature for children and analysis of issues in the field.

ENGL 7515 - Special Topics in Children's and Adolescent Literature
3 credit hours Selected genre, period, ethnicity, tradition, or literary focus on children's and/or young adult literature. Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 7521 - Literature for Adolescents
3 credit hours Survey of literature written for adolescents, including history, contemporary trends, and critical issues in the field.

ENGL 7551 - Popular Culture Studies
3 credit hours Major trends and significant debates in the development of popular culture theory and criticism.

ENGL 7555 - Special Topics in Popular Culture Studies
3 credit hours A theme, genre, period, text, or artist in one or more popular cultural media. Subject will vary each time the course is taught. May be taken for multiple credit up to 9 hours.

ENGL 7561 - Film Studies
3 credit hours Covers such topics as the film text, adaptation, narratology, genres, ideology, authorship, theory, history, schools, movements, national cinemas, and film audiences.

ENGL 7565 - Special Topics in Film Studies
3 credit hours Examines a theme, genre, director, period, school or movement, national cinema, etc. Subject will vary each time course is taught. May be taken for multiple credit up to 9 hours.

ENGL 7571 - Studies in Folklore
3 credit hours Study of folklore with focus on the history of the discipline.

ENGL 7575 - Special Topics in Folklore
3 credit hours Selected area of folklore: folk narrative, folklore and literature, folk song, folk religion, proverb, or folklore of a particular group. May be taken for multiple credit up to 9 hours.

ENGL 7601 - Studies in the Novel
3 credit hours The novel as a literary genre may be approached from a variety of perspectives, including generic, historical, theoretical, or single-author approaches. Course varies according to interests of instructor and students.

ENGL 7605 - Satire
3 credit hours Satire as a distinct genre, emphasizing its continuity in Western literature from antiquity to the present; representative works from four periods: ancient, medieval and Renaissance, eighteenth century, and modern; prose, poetry, and drama.

ENGL 7611 - Special Topics in Language and Literature
3 credit hours A specialized field of literary or linguistic inquiry, its bibliography, critical problems,

and probable solutions. Topics vary with the professor assigned to the course. May be taken for multiple credit up to 9 hours.

ENGL 7640 - Dissertation Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. S/U grading.

ENGL 7651 - Essentials of Linguistics
3 credit hours Major linguistic approaches to the study of language-dominant trends and current issues in linguistics; the phonological, morphological, and syntactic structure of the English language.

ENGL 7655 - Special Topics in the History of the English Language
3 credit hours Advanced study of various aspects of the English language from its beginnings in Proto-Indo-European to the present day (writing systems, Indo-European, phonology, morphology, syntax, lexicon, stylistics, semantics, etc.). Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 7701 - History of Criticism
3 credit hours Examines significant critical movements in Western literature from classical times into the twenty-first century.

ENGL 7705 - Contemporary Critical Theory
3 credit hours Covers major critical trends in literary theory since 1965, including feminist, Marxist, structuralist, and deconstructive approaches to literature. Students explore background and implications of these theories and analyze selected works of literature in light of these approaches.

ENGL 7711 - Reading Postmodernism
3 credit hours Theoretical discourse which works to define the cultural mindset known as postmodernism. Theories examined will be applied to examples of postmodern literature, film, and/or television. Topics emphasized include the instability of social and cultural categories, the dissolving boundaries between high and low culture and art, and the subversion of realist narrative strategies.

ENGL 7715 - Studies in Narratology
3 credit hours Examines modern and contemporary theories of narrative (modernist, rhetorical, structuralist, dialogical) with particular application to selected authors and texts.

ENGL 7801 - History of Rhetoric: Ancient to Renaissance
3 credit hours An examination of the major theorists and themes, including literary and pedagogical implications, from the ancient period to the Renaissance.

ENGL 7805 - History of Rhetoric: Early Modern to Contemporary
3 credit hours An examination of major theorists and themes, including literary and pedagogical implications, from early modern period to the present.

ENGL 7811 - Studies in Composition and Rhetoric
3 credit hours An introduction to the intellectual foundations of composition studies focusing on influential theories as well as the field's intellectual and disciplinary history.

ENGL 7815 - Special Topics in Composition and Rhetoric
3 credit hours Intensive examination of themes, periods, figures, and texts in composition and/or rhetoric. Subject will vary with instructor. May be taken for multiple credit up to 9 hours.

ENGL 7821 - Seminar in Teaching Composition
3 credit hours Open only to first-year teaching assistants or with consent of instructor.

ENGL 7825 - Practicum in Composition Methodology
3 credit hours In-depth study of how composition theory and research inform methodology. Topics covered vary according to interests of instructor and students.

ENGL 7851 - Writing Center Theory
3 credit hours Examines the theoretical and practical components of writing center work, including collaborative, composition, learning, writing center, and postmodern theories. Open to all graduate students.

ENGL 7861 - Middle Tennessee Writing Project (MTWP) Summer Institute
3 credit hours Reserved for invited participants in the Middle Tennessee Writing Project. Acquaints students with composition and pedagogical theories, practices for the teaching of writing, methods of research and presentation, development of writing resources including grant writing, various genres of writing and writing response, and publishing.

ENGL 7871 - Poetry Workshop
3 credit hours A rigorous writing course to develop the advanced writer's use of point-of-view, tone, rhythm, meter, line, and stanza. Practice in both the spontaneity of composition and the deliberate, disciplined work of revision. Examination, through poems and essays by relevant authors, of the movements, forms, and possibilities of contemporary poetry.

ENGL 7881 - Seminar in Teaching of Literature
3 credit hours Recommended for second-year teaching assistants and others interested in teaching literature.

ENGL 7901 - Directed Reading and Research
3 credit hours Prerequisite: Permission of the director of graduate studies. Individually supervised reading and research in an area of English. Students may apply no more than two directed reading courses toward their degree requirements.

ENGL 7905 - Internship
3 credit hours

ENGL 7909 - Doctoral Readings
3 credit hours Prerequisite: ENGL 7001 or the equivalent with a grade of B or better. A candidate-designed course of readings constructed in consultation with faculty in preparation for writing a dissertation.

ENGL 7999 - Preliminary Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the Ph.D. preliminary examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this preliminary examination preparatory course. Credit may not be applied to degree requirements.

Global Studies and Human Geography

David Carleton, Chair
615-898-5978
The Department of Global Studies and Human Geography offers courses at the graduate level.

Geography

GEOG 5270 - Special Problems and Topics in Cultural Geography
3 credit hours A detailed examination of a problem or topic significant in cultural geography. Topics vary, and particular topics addressed indicated by the course title in the published class schedule. Depending on the nature of the material to be covered, prerequisites may be imposed by the instructor. May be taken more than once for credit with different topics.

GEOG 5320 - Economic Geography
3 credit hours Relationship of the physical factors of the environment to the productive occupations of humans and the distribution of the products produced. Additional projects, reports, and/or papers.

GEOG 5330 - Political Geography
3 credit hours Significance of geographical factors in understanding political relationships within and among nations; spatial implications of political decision-making processes. Additional projects, reports, and/or papers.

GEOG 5340 - Historical Geography
3 credit hours Prerequisite: GEOG 2000 or permission of instructor. The changing human geography of the United States during four centuries of settlement and development. Emphasis on changing population patterns as well as patterns of urban and rural settlement. Additional projects, reports, and/or papers.

GEOG 5360 - Cultural Geography
3 credit hours Prerequisite: GEOG 2000 or permission of instructor. Description and explanation of spatial patterns and ecological relationships in human culture. Emphasis on reading the cultural landscapes. Requires an in-depth field component.

GEOG 5370 - Urban Geography
3 credit hours An introduction to the development of towns, cities, and associated urban areas. Environmental problems also examined. Classroom analysis of various theories of urban development and of data collected by field work. Preparation of appropriate land-use map.

GEOG 5402 - Field Course
4 credit hours Supervised study in some geographical area, preceded by classroom preview and concluded by a time of evaluation. Emphasis on the natural and cultural elements of the environment, with special attention directed toward the pattern of human occupancy. An intensive period of study and research on a full-time basis. Work required will depend on area researched and time involved. Consult department chair for specific fees.

GEOG 5410 - Geography of the United States and Canada
3 credit hours Natural, cultural, and geographic environment of these regions. Additional projects, reports, and/or papers.

GEOG 5420 - Geography of Latin America
3 credit hours Geographic regions of Mexico, Central America, the West Indies, and South America. Policy analysis and supporting data.

GEOG 5430 - Geography of Europe
3 credit hours General distribution of natural and cultural features of Europe followed by a detailed study of the regions and countries of the southern, central, and northwestern parts of the continent. Policy analysis of a European-oriented problem.

GEOG 5470 - Rural Settlement
3 credit hours Prerequisite: GEOG 2000 or permission of instructor. A geographical analysis of forms, structures, and distribution of rural settlements in distinctive parts of the earth based upon their origin, function, and development. Special emphasis given in analyzing rural settlements of middle Tennessee. Additional projects, reports, and/or papers

GEOG 5500 - Geography of the Middle East
3 credit hours An analysis of the problems, issues, and theories involved in understanding the physical, cultural, and regional geography of the area. Additional projects, reports, and/or papers.

Global Studies

GS 5270 - Special Problems and Topics in Global Studies
3 credit hours A detailed examination of a problem or topic significant in Global Studies. Topics vary, and particular topics addressed indicated by the course title in the published class schedule. Depending on the nature of the material to be covered, prerequisites may be imposed by the instructor. May be taken more than once for credit with different topics.

History

Emily Baran, Interim Chair
(615) 898-2642
Emily.Baran@mtsu.edu
The History Department offers the Master of Arts in History, Master of Arts in History with a concentration in Public History, and a Ph.D. in Public History. The department also offers a graduate certificate in Museum Management.

History Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

History, M.A.

Ashley Riley Sousa, Graduate Studies Director
(615) 898-5805
Ashley.RileySousa@mtsu.edu
The History Department offers the Master of Arts in History, Master of Arts in History with a concentration in Public History, and a Ph.D. in Public History.
For the most current information about the program, department policies, and admission standards, please visit the department website at www.mtsu.edu/history.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Arts in History program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average in all college work;
3. completion of at least 18 semester hours of undergraduate history courses.

Modifications to the above requirements may be made with the permission of the department's director of graduate studies and the department's graduate admissions committee.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline for the M.A. program is March 1 for fall admission and October 1 for spring admission.
Applicant must

1. submit application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php.) Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit letter of intent, explaining why applicant wishes to pursue graduate education in History and why applicant wishes to pursue those studies at MTSU;
4. submit writing sample (preferably a lengthy research paper that demonstrates writing and research skills);
5. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.A. program in History.

Degree Requirements

The Master of Arts in History requires completion of a minimum of 30 semester hours (thesis) or 33 semester hours (non-thesis).

Thesis Option (30-45 hours)

Once admitted to the program, candidate must

1. complete a minimum of 30 hours of graduate history courses, all at the 6000 level (see Curriculum section below for specifics);
2. maintain satisfactory progress toward completion of the degree each semester;
3. fulfill a research skill-set requirement by choosing one of the following options:
    a. demonstrate reading proficiency in a foreign language for research purposes by passing the specific proficiency examination administered by the Foreign Languages and Literature Department;
    b. compete one of the following professional development courses: HIST 6190, HIST 6225, HIST 6530, HIST 6550, HIST 6551, or HIST 6555. Courses outside the History Department may also be

considered with the written approval of the graduate director.
NOTE*: A course used to satisfy the professional skill requirement may not also be counted toward meeting another degree requirement.*

4. submit and successfully defend an acceptable thesis.

Non-thesis Option (33 hours)

Once admitted to the program, candidate must

1. complete 33 hours of graduate history courses, all at the 6000 level (see Curriculum section below for specifics);
2. pass comprehensive examinations;
3. maintain satisfactory progress toward completion of the degree each semester;
4. fulfill a skill set requirement by choosing one of the following options:
    a. demonstrate reading proficiency in a foreign language for research purposes by passing the specific proficiency examination administered by the Foreign Languages and Literature Department;
    b. complete one of the following professional development courses: HIST 6190 State and Local History, HIST 6225 Oral History Theory and Methodology, HIST 6530 Administration of Historical Organizations, HIST 6550 American Material Culture, HIST 6551 American Architectural History, and HIST 6555 Archeology and Public History. Courses outside the History Department may also be considered, with the written approval of the graduate director.
    NOTE: A course used to satisfy the professional skill requirement may not also be counted toward meeting another degree requirement.

Curriculum: History

Thesis Option (30-45 hours)

The following illustrates the minimum coursework requirements (all at the 6000 level). In addition, a maximum of 18 hours of thesis research may be required to fulfill degree requirements.

Required Core Courses (6 hours)

- HIST 6010 - Historiography **3 credit hours**
- HIST 6020 - Historical Research Methods **3 credit hours**

Thesis Field (12-15 hours)

- 12–15 hours of either American or European History

History electives (6-9 hours)

- 6–9 hours outside the thesis field

Thesis Research (3-18 hours)

- HIST 6640 - Thesis Research **1 to 6 credit hours**

Note:

No more than three hours of HIST 6910/HIST 6920/HIST 6930 may be counted toward degree requirements.

Non-thesis Option (33 hours)

The following illustrates the coursework requirements (all at the 6000 level) for the non-thesis option.

Required Core (6 hours)

- HIST 6010 - Historiography **3 credit hours**
- HIST 6020 - Historical Research Methods **3 credit hours**

Major Field (15 hours)

- 15 hours of either American or European History including at least three hours of graduate research seminar in field

History electives (9 hours)

- 9 hours of elective History courses

Additional Graduate Research Seminar (3 hours)

- 3 hours of graduate research seminar in any field

Note:

No more than three hours of HIST 6910/HIST 6920/HIST 6930 may be counted toward degree requirements.

History, Public History Concentration, M.A.

Ashley Riley Sousa, Graduate Studies Director
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Lisa Pruitt, Public History Program Director
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The History Department offers the Master of Arts in History, Master of Arts in History with a concentration in Public History, and a Ph.D. in Public History. The Public History concentration offers specialized education in one of five tracks: historic preservation and cultural resource management, museum management, archival management, oral history, and public archeology.
For the most current information about the program, department policies, and admission standards, please visit the department website at www.mtsu.edu/history.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Arts in History with a concentration in Public History program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average in all college work taken;
3. completion of at least 18 semester hours of undergraduate history courses.

Modifications to the above requirements may be made with the permission of the department's director of graduate studies and the department's graduate admissions committee.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline for the M.A. program is March 1 for fall admission and October 1 for spring admission.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit letter of intent, explaining why applicant wishes to pursue graduate education in public history and why applicant wishes to pursue those studies at MTSU;
4. submit writing sample (preferably a lengthy research paper that demonstrates writing and research skills);
5. submit three letters of recommendation from professors or professionals that address the applicant's potential to successfully complete an M.A. program in public history.

Degree Requirements

The Master of Arts in History with a concentration in Public History requires completion of 33-45 semester hours (thesis) or 36 semester hours (non-thesis). All public history students must complete an internship off campus.

Thesis Option (33-45 hours)

Once admitted to the program, candidate must

1. complete 33-45 hours of graduate-level history and public history courses, all at the 6000 level (see Curriculum section below for specifics);
2. pass formal review of a portfolio demonstrating proficiency in three domains of professional skills in accordance with the standards and protocols issued by the department;

3. maintain satisfactory progress toward completion of the degree each semester;
4. submit an acceptable thesis.

Non-thesis Option (36 hours)

Once admitted to the program, candidate must

1. complete 36 hours of graduate-level coursework, all at the 6000-level (see Curriculum section below for specifics);
2. pass formal review of a portfolio demonstrating proficiency in three domains of professional skills in accordance with the standards and protocols issued by the department;
3. maintain satisfactory progress toward completion of the degree each semester;
4. complete comprehensive examinations in the field of public history and a second field of history.

Curriculum: History, Public History

Thesis Option (33-45 hours)

The following illustrates the coursework requirements (all at the 6000 level). In addition, a maximum of 15 hours of thesis research may be required to fulfill degree requirements.

Required Core Courses (9 hours)

- HIST 6010 - Historiography **3 credit hours**
- HIST 6020 - Historical Research Methods **3 credit hours**
- HIST 6510 - Seminar: Public History **3 credit hours**

Public History Essentials (3 hours in appropriate track)

- HIST 6225 - Oral History: Theory and Methodology **3 credit hours**
- HIST 6535 - Essentials of Museum Management **3 credit hours**
- HIST 6610 - Essentials of Historic Preservation and Cultural Resource Management **3 credit hours**
- HIST 6615 - Essentials of Archival Management **3 credit hours**
- HIST 6710 - Essentials of Public Archaeology **3 credit hours**

Internship (3 hours)

- HIST 6570 - Public History Internship **3 credit hours**

Public History electives (6 hours)

- 6 hours selected in consultation with public history faculty

History electives (9 hours)

- 9 hours outside the public history field

Thesis Research (3-15 hours)

- HIST 6640 - Thesis Research **1 to 6 credit hours**

NOTE:

No more than three hours of HIST 6910, HIST 6920, HIST 6930, or HIST 6994 may be counted toward degree requirements.

Non-thesis Option (36 hours)

The following illustrates the coursework requirements (all at the 6000 level) for the non-thesis option.

Required Core Courses (9 hours)

- HIST 6010 - Historiography **3 credit hours**
- HIST 6020 - Historical Research Methods **3 credit hours**
- HIST 6510 - Seminar: Public History **3 credit hours**

Public History Essentials (9 hours)

- HIST 6225 - Oral History: Theory and Methodology **3 credit hours**
- HIST 6535 - Essentials of Museum Management **3 credit hours**
- HIST 6610 - Essentials of Historic Preservation and Cultural Resource Management **3 credit hours**
- HIST 6615 - Essentials of Archival Management **3 credit hours**
- HIST 6710 - Essentials of Public Archaeology **3 credit hours**

Internship (3 hours)

- HIST 6570 - Public History Internship **3 credit hours**

Public History Electives (6 hours)

- 6 hours selected in consultation with public history faculty

History electives (9 hours)

- 9 hours outside the public history field, of which 3 must be in a graduate research seminar

NOTE:

No more than three hours of HIST 6910, HIST 6920, HIST 6930, or HIST 6994 may be counted toward the degree.

Museum Management Certificate

Ashley Riley Sousa, Graduate Studies Director
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(615) 898-2051
Lisa.Pruitt@mtsu.edu
The History Department offers the Master of Arts in History, Master of Arts in History with a concentration in Public History, and a Ph.D. in Public History as well as a graduate certificate in Museum Management.
The certificate program seeks to provide an opportunity for students to pursue advanced study for careers in museum management and in-depth professional training for graduate students seeking employment in public and private institutions at the national, state, and local levels. This certificate in Museum Management also provides a transitional bridge to the Ph.D. program in Public History.
The certificate of advanced study in Museum Management offers an opportunity for students to take relevant graduate courses outside the History Department to meet their specific needs and interests.
For the most current information about the program, department policies, and admission standards, please visit the department website at www.mtsu.edu/history.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Museum Management certificate program requires

1. an earned master's degree from an accredited university or college or current enrollment in a master's degree program;
2. an acceptable grade point average in all college work taken.

Modifications to the above requirements may be made with the permission of the department's director of graduate studies and the department's graduate committee.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. meet the admission requirements of the University and the program.
2. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**) Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
3. submit official transcripts of all previous college work.

Certificate Requirements

Once admitted to the program, candidate must

1. complete 12 hours of graduate history courses, all at the 6000 level (see Curriculum section below for specifics);
2. maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate;
3. successfully complete a portfolio review.

Curriculum: Museum Management

All candidates for the graduate certificate in Museum Management must complete 12 hours in the following course of study:

Required Course (3 hours)

- HIST 6540 - Seminar: Museum Management **3 credit hours**

Electives (9 hours)

- HIST 6220 - Seminar in Public Programming for Historical Organizations and Archives **3 credit hours**
- HIST 6225 - Oral History: Theory and Methodology **3 credit hours**
- HIST 6530 - Seminar: Administration of Historical Organizations **3 credit hours**
- HIST 6545 - Seminar in Management of Collections for Historical Organizations and Archives **3 credit hours**
- HIST 6555 - Archaeology and Public History **3 credit hours**
- HIST 6993 - Current Issues in Public History Practice **3 credit hours**
- HIST 6994 - Advanced Projects in Public History **3 credit hours**

Program Notes

Students may transfer up to six (6) credit hours of approved coursework into the certificate program. The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.

Public History, Ph.D.

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The History Department offers the Master of Arts in History, Master of Arts in History with a concentration in Public History, and a Ph.D. in Public History.
For the most current information about the program, department policies, and admission standards, please visit the department website at www.mtsu.edu/history.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Doctor of Philosophy (Ph.D.) in Public History program requires

1. an earned master's degree in history or a related field from an accredited university of college.
2. completion of at least 18 semester hours of graduate or undergraduate history credit. Applicants who do not meet these minimums and are admitted conditionally have one year to satisfy the conditions of admission.
3. an acceptable grade point average (GPA) in master's degree work (and an acceptable GPA in undergraduate history classes).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline for the Ph.D. is February 1. The History Department does not consider graduate students for spring or summer admission.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit letters of recommendation from at least three public history professionals or academics that address the candidate's potential for successfully completing a Ph.D. in Public History and describe the qualities that will make them an excellent public historian;
4. submit an approximately 500-word letter of intent noting why applicant wishes to pursue a Ph.D. in Public History, why applicant wishes to do so at Middle Tennessee State University, and career goals after a Ph.D. in Public History is attained;
5. submit a professional portfolio containing work that demonstrates mastery of research methods, historical analysis, interpretation, and presentation. The portfolio may include research papers, projects, publications, proposals, exhibits, and other public history-related work.

Degree Requirements

The Doctor of Philosophy in Public History requires completion of 60-80 semester hours.
Once admitted to the program, each candidate must

1. complete 60-80 hours of graduate history courses, all at the 6000 and 7000 level, with a minimum of 42 hours at the 7000 level (see Curriculum section below for specifics);
2. fulfill a foreign language/professional skill requirement;
   Before filing a degree plan with the College of Graduate Studies, students must elect to satisfy the foreign language/professional skill requirement by choosing one of the following options:

    a. demonstrate reading proficiency in a foreign language for research purposes by passing the specific proficiency examination administered by the World Languages, Literatures, and Cultures;
    b. elect an alternative research or professional skill such as GIS, oral history, quantitative analysis for history, American Sign Language, a specialized area of critical theory, or a professional level of competency in relevant information technology platforms. Students are responsible for finding appropriate courses or an expert willing to train them and test competency. The public history director, graduate director, and major professor all must approve petitions for alternative research or professional skills. Regardless of the option selected, a student will demonstrate proficiency in the professional portfolio.
3. maintain satisfactory progress toward completion of the degree each semester;
4. develop a residency proposal and identify a professional mentor for the professional residency colloquium;
5. take and pass written and oral preliminary exams in the history field and interdisciplinary field. The written exams are based on coursework and a substantial reading list developed by both the student and the field advisors. As part of the oral exam, the candidate must defend the residency proposal. The written exams are evaluated by the student's history advisor and interdisciplinary advisor; the oral exam is evaluated by the student's dissertation advisory committee.
6. enroll in the Professional Residency Colloquium for two consecutive semesters and develop a professional portfolio;
7. constitute a dissertation committee and develop a dissertation proposal;
8. orally defend the professional portfolio (which includes an essay integrating experience, knowledge, and practice) and dissertation proposal;
9. complete a dissertation and successfully defend it in the final oral examination.

Curriculum: Public History

The following illustrates the minimum coursework requirements. In addition, a maximum of 32 hours of dissertation research may be required to fulfill degree requirements.

Required Core (15 hours)

- HIST 7510 - Seminar: Public History **3 credit hours**
- HIST 7991 - Professional Residency Colloquium **6 credit hours**
- HIST 7992 - Professional Residency Colloquium **6 credit hours**

Public History Field (12-15 hours)

- Seminars--Candidates will choose from public history seminars offered by the department according to their areas of specialization

History Field (9-15 hours)

In order to practice public history effectively in any area of specialization, students must have an excellent grasp of historical context. Hence, in consultation with the public history director and dissertation advisory committee, each student will construct a history field focused chronologically, geographically, or topically, selecting courses from the history seminars offered by the department. Each student will demonstrate mastery of this field through qualifying exams.

Interdisciplinary Field (9-12 hours)

It is important that students understand public history practice from multiple perspectives. Hence, in consultation with the public history director and dissertation advisory committee, each student will design an interdisciplinary field that complements and strengthens his or her public history specialization, selecting potential graduate courses from

history, anthropology, mass communications, recreation and leisure, business, or other departments as appropriate. Each student will demonstrate mastery of the interdisciplinary field through qualifying exams.

Dissertation (12-32 hours)

- HIST 7640 - Dissertation Research **1 to 6 credit hours** (12 hours minimum)

Note:

No more than six hours of HIST 6910, HIST 6920, HIST 7910, or HIST 7920 may be counted toward degree requirements.
No more than nine hours of HIST 6930 or HIST 7930 may be counted toward degree requirements.
No more than six hours of HIST 6994 or HIST 7994 may be counted toward degree requirements.

Program Notes

Students entering with a Master's in History and extensive, recent, professional experience may have up to 12 credit hours applied after a determination that the content of previous courses and the nature of recent professional activities meet the student learning outcomes for graduate courses in history.

History

HIST 5010 - Colonial America
3 credit hours Exploration and colonization of North America, relations between Native Americans, Europeans, Africans, and colonial societies in the context of the Atlantic world from 1492 to 1760.

HIST 5020 - The American Revolution
3 credit hours Examines international conflicts from the Seven Years' War through the War of 1812 while emphasizing political, social, intellectual, and economic developments in the new United States.

HIST 5030 - Jacksonian America, 1815-1850
3 credit hours The major political, social, and economic developments in the awakening of American nationalism, Jacksonian Democracy, expansionism, and the Mexican War.

HIST 5040 - Civil War and Reconstruction
3 credit hours Sectional differences of the 1850s. Civil War, Reconstruction, and the Grant Era.

HIST 5050 - Modern America, 1877-1914
3 credit hours The nature and consequences of the shift of the United States from an agrarian to an urban and industrialized society between Reconstruction and World War I.

HIST 5060 - Modern America, 1914-1945
3 credit hours The increasing involvement of the United States in world affairs from World War I through World War II and of the social and political consequences of economic complexity which resulted in prosperity, depression, and the New Deal.

HIST 5070 - Modern America, Post-1945
3 credit hours The major social, political, economic, and diplomatic developments in the history of the United States from 1945 to the present with particular emphasis on the role of the United States in world affairs and the changing role of government.

HIST 5130 - The Sunbelt
3 credit hours The Southern rim of states from a nineteenth-century American outpost to the modern pacesetting position in economics, culture, racial relationships, and politics with such leaders as King, Nixon, Carter, and Reagan.

HIST 5140 - The United States West
3 credit hours History of the United States West with an emphasis on the area west of the Mississippi River from pre-contact to the twenty-first century. Explores major social, political, economic, and environmental issues with particular attention to race, class, gender, and the original inhabitants.

HIST 5150 - The American South
3 credit hours The major themes that have created and recreated southern culture from the colonial period to the present. Major social, political, and economic factors that made and remade the region through time.

HIST 5210 - Middle Ages
3 credit hours An intensive survey of the progress of medieval civilization with emphasis on Byzantine, Moslem, and Germanic cultures in the Middle Ages.

HIST 5212 - Intellectual and Cultural History of Early Modern Europe
3 credit hours Major trends and movements in artistic, literary, social, economic, political, scientific, and religious thought in cultural context and diffusion in society; how these trends and movements have changed European concepts since the Enlightenment. Begins about 1200 to establish a background and then focuses on 1400 to 1789.

HIST 5213 - Intellectual and Cultural History of Modern Europe
3 credit hours Major trends and movements in artistic, literary, social, economic, political, scientific, and religious thought in cultural context and diffusion in society; how these trends and movements have changed European concepts since the Enlightenment. Begins about 1650 to establish a background and then focuses on 1789 to the present.

HIST 5220 - Renaissance Europe
3 credit hours Survey of political, economic, social, intellectual, and cultural developments of Italy, France, England, Germany, and the Low Countries during the fourteenth through the seventeenth centuries.

HIST 5230 - Reformation Europe
3 credit hours Survey of political, economic, social, intellectual, and cultural developments of Italy, France, England, Germany, and the Low Countries during the sixteenth and seventeenth centuries.

HIST 5240 - Europe: Absolutism and Enlightenment
3 credit hours European history in the seventeenth and eighteenth centuries, covering social, economic, intellectual, and political developments.

HIST 5250 - Europe: The French Revolution and Napoleon
3 credit hours The social, political, and economic aspects of the old regime, the French Revolution, and the Napoleonic period in European history.

HIST 5260 - France Since 1870
3 credit hours The social, political, intellectual, cultural, and economic history of France from the origins of the Third Republic to the present.

HIST 5270 - Europe: 1815-1900
3 credit hours Nineteenth-century Europe.

HIST 5280 - Europe: 1900-1939
3 credit hours Emphasis on the impact of continued industrialization, total war, and totalitarian ideologies in the early twentieth century.

HIST 5290 - Europe Since 1945
3 credit hours The major European countries and common European-wide themes from World War II to the present.

HIST 5310 - Germany to 1870
3 credit hours The evolution of the German states from their Indo-European origins to their unification in a single German nation in 1871 with particular emphasis on the history of German men and women since the Middle Ages. History of Austria and its possessions also included.

HIST 5320 - Germany Since 1870
3 credit hours The history of Germany from national unification in 1871 through its reunification in the contemporary world. Course emphasizes major social, cultural, political, intellectual, and economic developments of the period as they relate to both German men and women. History of the Austro-Hungarian empire (1867-1918) and the modern Austrian state also included.

HIST 5330 - Russia to the Twentieth Century
3 credit hours Russian history from its beginnings to the end of the nineteenth century.

HIST 5340 - Russia in the Twentieth Century
3 credit hours A continuation of HIST 5330 emphasizing the Revolution and the Soviet era.

HIST 5350 - England to 1783
3 credit hours English history from earliest times to the end of the American Revolution, with emphasis on major political, economic, cultural, and social developments.

HIST 5360 - Britain in the Nineteenth Century
3 credit hours Survey of British political, economic, diplomatic, military, and cultural developments from the end of the Napoleonic era to Gladstone's retirement in 1894.

HIST 5370 - Britain in the Twentieth Century
3 credit hours The political, military, imperial, economic, and social history of a changing Britain in its century of total war, imperial decline, and economic readjustment.

HIST 5410 - Classical History
3 credit hours Ancient Greece and Rome, from about 2,000 B.C. to A.D. 476, emphasizing the classical historians and Greek and Roman culture.

HIST 5420 - The Medieval Mediterranean World
3 credit hours A regional survey of political, economic, social and intellectual, and cultural development of the countries bordering the Mediterranean.

HIST 5440 - The Middle East
3 credit hours The development of the Near East, the rise and spread of Islam, the Ottoman Empire, European imperialism in the Near East, contemporary developments. Emphasis on cultural contributions of the Near East to western civilization.

HIST 5450 - Japan
3 credit hours Survey of Japanese history from the formation of the first Japanese political state to the country's emergence as a post-World War II economic superpower.

HIST 5460 - China
3 credit hours Survey of Chinese history from antiquity to the present People's Republic, stressing social history and the unique cultural features defining China's civilization.

HIST 5470 - Canada
3 credit hours Canadian history from the colonial era to the present.

HIST 5480 - South America
3 credit hours The development of cultural, economic, and political traditions since 1492.

HIST 5490 - Mexico and the Caribbean
3 credit hours The development of cultural, economic, and political traditions since 1492.

HIST 5510 - Aztecs, Incas, and Conquest
3 credit hours Examines Aztecs, Mayas, Incas, and other indigenous peoples of Mexico, the Caribbean, and South America during the first encounters. Analyzes social, cultural, and political implications of conquest, colonialism, and the blending of civilizations from the Americas, Europe, and Africa.

HIST 5520 - Modern Latin America
3 credit hours Examines colonial background of Latin America, moving to an exploration of economic, political, social, and cultural developments in Latin America since independence.

HIST 5530 - Latin American-United States Relations
3 credit hours Relations between the United States and Latin America in the nineteenth and twentieth centuries with emphasis on the effect of cultural differences on inter-American diplomacy.

HIST 5560 - Ancient Egypt
3 credit hours Examines political, social, and cultural developments reflected in Egyptian artistic, literary, and architectural works within the context of the 3,000 years from the Predynastic Period through the Ptolemaic Dynasty (3200-32 B.C.E.).

HIST 5610 - History of Medicine
3 credit hours Medical developments and in particular the relationship between medicine and society. Examines two medical traditions: the West and China. Discussions not only on major developments in medicine but also of the systems of healing in these cultures and comparison of the different roles medicine played within these societies. Also investigates the impact of Western scientific medicine on the various systems of traditional medicine.

HIST 5620 - American Medical History
3 credit hours The history of health in the United States and the changing role and perception of the medical profession from 1607 to the present.

HIST 5630 - Computer and Quantitative History
3 credit hours Examines quantitative reasoning in historical research. Covers historiographical questions and practical research skills. Includes historical causality, historical change over time, data preparation, sampling, and the interpretation of quantitative data.

HIST 5640 - Environmental History
3 credit hours Traces environmental change in America from the Puritans to the present and from wilderness to suburbia. Explains impact of growth, settlement, and resource exploitation on our national landscape and institutions.

HIST 5650 - Religious Experience in America
3 credit hours Explores the nature of religion as experienced in American history focusing on the questions "How has religion affected America?" and "How has America affected religion?" Emphasis on the nineteenth and twentieth centuries and on the contact of and exchanges among traditions such as Protestant-Catholic Christianity, Judaism, Islam, and Animism.

HIST 5660 - American Architectural History
3 credit hours An analysis of the historical development of American architecture and of architecture as evidence of America's cultural, social, economic, and technological growth from 1607 to the present.

HIST 5665 - American Urban History
3 credit hours A survey of the development and growth of cities and suburbs from the colonial period to the present with particular emphasis on urban institutions, problems, politics, culture, and society.

HIST 5680 - History of Sport in America
3 credit hours The role of sport in American society from the colonial era to the present, with emphasis on how sporting activities reflect political, cultural, and economic characteristics of various time periods.

HIST 5690 - Native American History
3 credit hours United States American Indian history from pre-contact to the present with emphasis on

issues important to native people and on their active participation in a constantly changing world.

HIST 5710 - American Biography
3 credit hours A survey of the lives and achievements of men and women most prominent in American history. Selected biographies and autobiographies read and analyzed.

HIST 5720 - Boone's and Crockett's America
3 credit hours Studies the mass movement of farm families into the interior of North America before 1860, with particular emphasis on Native American life, frontier politics, society, and culture, as well as the subsequent development of a frontier myth celebrating this migration.

HIST 5730 - American Social History
3 credit hours Examines class, ethnicity, family life, and community in America from the colonial period to the present.

HIST 5740 - American Cultural and Intellectual History
3 credit hours Explores the major issues in American cultural and intellectual history through an examination of American literature, philosophy, social sciences, fine arts, and popular culture.

HIST 5750 - African American Social and Intellectual History
3 credit hours The changing role and status of African Americans in American life and the contributions to the culture and institutions of the United States.

HIST 5760 - America Divided: Race, Class, and Gender
3 credit hours Interaction of race, class, and gender in the lives of Americans within historical frameworks; how such interactions have shaped American social and political institutions.

HIST 5770 - Women in America to 1890
3 credit hours Examines women's roles in the United States from colonial times to 1890, emphasizing the experiences of women of different classes, races, and ethnic groups with work, family, and politics.

HIST 5775 - U.S. Women's History
3 credit hours Explores the distinctive histories of women across the breadth of American history. Instructors will choose specific events, issues, or themes to reveal the forces that shaped women's experiences and actions.

HIST 5780 - Women in America Since 1890
3 credit hours Examines women's roles in the United States since 1890, emphasizing the experiences of women in different classes, races, and ethnic groups with work, family, and politics.

HIST 5790 - Women in Europe Since 1700
3 credit hours A comparative study of the social, intellectual, cultural, political, and economic history of women's lives in Great Britain, France, Germany, and Russia since 1700.

HIST 5810 - History of Women in the Third World
3 credit hours Examines the connections between modern colonialism and the development of third-world feminisms. First focuses on conquest and colonialism and the consequences for third-world women of that process, then moves to postcolonial societies and expands to include women's political, economic, and social roles in the three regions of Africa, China, and Latin America.

HIST 5820 - Diplomatic History of the United States to 1900
3 credit hours United States foreign relations to 1900.

HIST 5830 - Diplomatic History of the United States Since 1900
3 credit hours United States foreign relations since 1900.

HIST 5840 - World War II
3 credit hours Examines various aspects of the military, diplomatic, social, economic, and cultural changes caused by the global cataclysm of World War II.

HIST 5850 - Material Culture Resources in World History
3 credit hours A survey of the architecture, furniture, tools, utensils, weapons, ceremonial objects, etc., of the world's major civilizations. Provides a basis for studying how various cultural styles have influenced the development of our own material culture resources.

HIST 5860 - Historical Archaeology
3 credit hours (Same as ANTH 5860 .) Introduces the disciplines of historical archaeology, including

examination of archaeological evidence, historical documentation, and interpretation of evidence.

HIST 6010 - Historiography
3 credit hours An introduction to history's major schools of thought. Through reading, class discussion, and essays, students explore critical interpretations in American, European, and non-Western history.

HIST 6020 - Historical Research Methods
3 credit hours Introduces historical research using primary sources. Students produce a work (or works) of original historical scholarship and engage with existing scholarship in the field.

HIST 6101 - Seminar: Readings in Early American History
3 credit hours Analyzes scholarly literature on the history of North America from the emergence of native societies through the American Revolution.

HIST 6102 - Seminar: Readings in Nineteenth-Century American History
3 credit hours Analyzes scholarly literature on the history of the United States during the nineteenth century.

HIST 6103 - Seminar: Readings in Modern American History
3 credit hours Analyzes scholarly literature on the history of the United States during the twentieth century.

HIST 6104 - Seminar: Topics in American History
3 credit hours Analyzes scholarly literature on a major topic in the history of the United States. May be taken more than once for credit with different topic.

HIST 6105 - Seminar: Research in American History
3 credit hours Intensive primary source research and scholarly writing in United States history. May be taken more than once for credit with different topic.

HIST 6190 - Seminar: State and Local History
3 credit hours An intensive inquiry into sources of state and local history. Several research papers using primary materials required.

HIST 6201 - Seminar: Readings in Pre-Modern European History
3 credit hours Analyzes scholarly literature on the history of Europe through the seventeenth century.

HIST 6202 - Seminar: Readings in Modern European History
3 credit hours Analyzes scholarly literature on the history of Europe through the sixteenth century.

HIST 6204 - Seminar: Topics in European History
3 credit hours Analyzes scholarly literature on a major topic in the history of Europe. May be taken more than once for credit with different topic.

HIST 6205 - Seminar: Research in European History
3 credit hours Intensive primary source research and scholarly writing in European history. May be taken more than once for credit with different topic.

HIST 6220 - Seminar in Public Programming for Historical Organizations and Archives
3 credit hours Examines the theory and practice of educational outreach and public programming for historical organizations. Designed to provide in-depth study in reference services, outreach, history education, advocacy, and assessment for a variety of cultural institutions.

HIST 6225 - Oral History: Theory and Methodology
3 credit hours Examines theory and methodology of oral history, including in-depth examination of the relationship of history and memory; explores oral history in texts, films, websites, and museum exhibits. Students focus on how to conduct professional quality oral history interviews, how to process the materials, and how to organize a professional project.

HIST 6226 - Public History Fieldwork
3 credit hours Examines public and oral history project design, fieldwork methods, ethical relationships with diverse communities, documentation and interpretation of historical images and family photographs, development of public interpretive programs based on public and oral history in multi-media environments, and relationship between memory, history and representation.

HIST 6304 - Seminar: Topics in Global History
3 credit hours Analyzes scholarly literature on a major topic in world history. May be taken more than once for credit with different topic.

HIST 6305 - Seminar: Research in Global History
3 credit hours Intensive primary source research and scholarly writing in world history. May be taken more than once for credit with different topic.

HIST 6450 - Digital Tools for Historians
3 credit hours Introduces the fields of digital history and humanities with a particular focus on how digital history will serve public historians. Explores the standards and methods of the field through the production of a collaborative digital history project.

HIST 6510 - Seminar: Public History
3 credit hours The professional nature of public history, the interpretation of history for diverse audiences, and the application of historical methods in the wider world. Combines reading and discussion, interaction with practicing professionals, and possible experiential learning component.

HIST 6520 - Seminar: Historic Preservation
3 credit hours Readings and research on selected topics related to the history, organization, and administration of historic preservation in the United States and to the use of the community as a classroom.

HIST 6530 - Seminar: Administration of Historical Organizations
3 credit hours Intensive study of administrative functions, issues, and problems common to historical organizations. Combines reading and discussion, team problem-solving, and experiential learning component served in a local historical organization.

HIST 6535 - Essentials of Museum Management
3 credit hours Examines history, theory, and methodologies of museums. Explores the roles of history museums in diverse communities and career options in museums, including administration, exhibit development, education, and collections.

HIST 6540 - Seminar: Museum Management
3 credit hours In-depth analysis of museum management issues from acquisitions and collections to curatorial care and exhibitions. Includes advanced problem-solving for museum staff and consideration of ethical issues such as repatriation of artifacts.

HIST 6545 - Seminar in Management of Collections for Historical Organizations and Archives
3 credit hours Examines theory and practice of collection management practices in archives and museums; designed to prepare students to manage archives and museum collections in a variety of cultural institutions.

HIST 6550 - Seminar: American Material Culture
3 credit hours Intensive study of cultural heritage resources available in the local community and methods for identifying, analyzing, and incorporating them into existing social studies and history courses.

HIST 6551 - Seminar: American Architectural History
3 credit hours In-depth, field-based exploration of the historiography, research questions, literature, and methodology of American architectural history designed to prepare students to conduct research and to prepare resource documentation to current professional standards.

HIST 6555 - Archaeology and Public History
3 credit hours Explores the relationship between archaeological research and public history with an emphasis on methodology, theory, and interpretation and how to ethically and effectively communicate conclusions to the public.

HIST 6570 - Public History Internship
3 credit hours Full-time apprenticeship (300 hours) with a public or private historical agency or institution of regional or national significance. Internships offered during the summer months and may be paid. Enrollment limited to history students in the public history program. Pass/Fail.

HIST 6590 - Practicum in Archival Management
3 credit hours Opportunity for students interested in careers in archival management to complete an in-depth practice-based study in a specialized topic in archival management and to develop skills in project design and management under the joint supervision of MTSU faculty and staff of a sponsoring entity.

HIST 6610 - Essentials of Historic Preservation and Cultural Resource Management
3 credit hours Regulatory policies and procedures employed by federal, state, and local agencies in the work of identifying, evaluating, recording, preserving, and managing the historical, architectural, and cultural

resources of the United States. Emphasis on implementing the National Historic Preservation Act and the documentation requirements of the National Register of Historic Places.

HIST 6615 - Essentials of Archival Management
3 credit hours Examines major concepts, vocabulary, standards, professional ethics, and current issues in archival management. Includes readings, class discussions, and in-class exercises supplemented by guest lectures, field trips, and a field project.

HIST 6620 - Seminar in Archival Management
3 credit hours In-depth study of the nature of records and record keeping, communication and information management theory, and the seven domains of archival practice through lectures, readings, discussion, and research. Also addresses the impact of emerging technologies on archival management.

HIST 6630 - Seminar: Topics in Archival Management
1 to 3 credit hours Prerequisite: HIST 6615/HIST 7615 or equivalent experience. Familiarizes students with the theoretical framework and current best practices in a specialized field of archival management.

HIST 6640 - Thesis Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

HIST 6710 - Essentials of Public Archaeology
3 credit hours Explores the disciplinary history, professional ethics, key concepts and debates, and best practices of public archaeology in the U.S. with emphasis on historical archaeology's contributions to American historiography, its relationship to cultural resource management and heritage legislation, and current issues in shared authority with diverse public audiences.

HIST 6720 - Field Methods in Public Archaeology
6 credit hours A combined archaeological field school and internship in public history. Students gain practical experience in the public excavation of an historic site with emphasis on standard best practices in professional ethics and archaeological methods.

HIST 6730 - Research Methods in Public Archaeology
3 credit hours Lab intensive. Explores artifact analysis and interpretation, spatial data analysis, and archaeological report-writing through practical experience within an ongoing research project.

HIST 6870 - Archaeological Fieldwork for Public Historians
3 credit hours Archaeological practicum for students including the collection, recording, processing and interpretation of material culture as it relates to the understanding of historical societies.

HIST 6910 - Selected Studies in American History
3 credit hours Intensive reading on a carefully defined topic in American history to be selected by the student in conference with the instructor.

HIST 6920 - Selected Studies in European History
3 credit hours In-depth reading on a well-defined topic in European history to be selected by the student in conference with the instructor.

HIST 6930 - Selected Studies in Global History
3 credit hours Intensive reading on a carefully defined topic in global history to be selected by the student in conference with the instructor.

HIST 6940 - History Abroad
1 to 3 credit hours Examines historical issues while participating in an educational abroad program. In addition to readings, this experiential learning experience will utilize resources such as historic sites, museums, archaeological sites, and archives while abroad.

HIST 6990 - Teaching American History Summer Institute
3 credit hours Week-long session for teachers of grades 4-12 American history. Using historical scholarship and primary source materials, session is intended to enhance teachers' instruction in and knowledge of historical content by focusing on the study of a particular era in American history as determined by the 2001 Tennessee Curriculum Standards framework.

HIST 6993 - Current Issues in Public History Practice
3 credit hours Examines timely issues of public history practice in depth with a nationally recognized

scholar in the field of historic preservation, cultural resources management, museum management, oral history, public archaeology, or other area of professional practice.

HIST 6994 - Advanced Projects in Public History
3 credit hours Provides individualized, advanced training in historic preservation, cultural resources management, museum management, archival management, or other areas of public history practice.

HIST 6999 - Comprehensive Exam Prep
1 to 3 credit hours Open only to students who will take the master's comprehensive examination during the term. Student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

HIST 7101 - Seminar: Readings in Early American History
3 credit hours Analyzes scholarly literature on the history of North America from the emergence of native societies through the American Revolution.

HIST 7102 - Seminar: Readings in Nineteenth-Century American History
3 credit hours Analyzes scholarly literature on the history of the United States during the nineteenth century.

HIST 7103 - Seminar: Readings in Modern American History
3 credit hours Analyzes scholarly literature on the history of the United States during the twentieth century.

HIST 7104 - Seminar: Topics in American History
3 credit hours Analyzes scholarly literature on a major topic in the history of the United States. May be taken more than once for credit with different topic.

HIST 7105 - Seminar: Research in American History
3 credit hours Intensive primary source research and scholarly writing in United States history. May be taken more than once for credit with different topics.

HIST 7190 - Seminar: State and Local History
3 credit hours An intensive inquiry into sources of state and local history. Several research papers using primary materials required.

HIST 7201 - Seminar: Readings in Pre-Modern European History
3 credit hours Analyzes scholarly literature on the history of Europe through the seventeenth century.

HIST 7202 - Seminar: Readings in Modern European History
3 credit hours Analyzes scholarly literature on the history of Europe through the sixteenth century.

HIST 7204 - Seminar: Topics in European History
3 credit hours Analyzes scholarly literature on a major topic in the history of Europe. May be taken more than once for credit with different topic.

HIST 7205 - Seminar: Research in European History
3 credit hours Intensive primary source research and scholarly writing in European history. May be taken more than once for credit with different topic.

HIST 7220 - Seminar in Public Programming for Historical Organizations and Archives
3 credit hours Examines the theory and practice of educational outreach and public programming for historical organizations. Designed to provide in-depth study in reference services, outreach, history education, advocacy, exhibit development, and assessment for a variety of cultural institutions.

HIST 7225 - Oral History: Theory and Methodology
3 credit hours Examines theory and methodology of oral history, including in-depth examination of the relationship of history and memory; explores oral history in texts, films, websites, and museum exhibits. Students focus on how to conduct professional quality oral history interviews, how to process the materials, and how to organize a professional project.

HIST 7226 - Public History Fieldwork
3 credit hours
Examines public and oral history project design, fieldwork methods, ethical relationships with diverse communities, documentation and interpretation of historical images and family photographs, development of public interpretive programs based on public and oral history in multi-media environments, and relationship between memory, history and representation.

HIST 7304 - Seminar: Topics in Global History
3 credit hours Analyzes scholarly literature on a major topic in world history. May be taken more than once for credit with different topic.

HIST 7305 - Seminar: Research in Global History
3 credit hours Intensive primary source research and scholarly writing in European history. May be taken more than once for credit with different topic.

HIST 7450 - Digital Tools for Historians
3 credit hours Introduces the fields of digital history and humanities with a particular focus on how digital history will serve public historians. Explores the standards and methods of the field through the production of a collaborative digital history project.

HIST 7510 - Seminar: Public History
3 credit hours The professional nature of public history, the interpretation of history for diverse audiences, and the application of historical methods in the wider world. Combines reading and discussion, interaction with practicing professionals, and possible experiential learning component.

HIST 7520 - Seminar: Historic Preservation
3 credit hours Readings and research on selected topics related to the history, organization, and administration of historic preservation in the United States and to the use of the community as a classroom.

HIST 7530 - Seminar: Administration of Historical Organizations
3 credit hours Intensive study of administrative functions, issues, and problems common to historical organizations. Combines reading and discussion, team problem-solving, and experiential learning component served in a local historical organization.

HIST 7535 - Essentials of Museum Management
3 credit hours Examines history, theory, and methodologies of museums. Explores the roles of history museums in diverse communities and career options in museums, including administration, exhibit development, education, and collections.

HIST 7540 - Seminar: Museum Management
3 credit hours In-depth analysis of museum management issues from acquisitions and collections to curatorial care and exhibitions. Includes advanced problem-solving for museum staff and consideration of ethical issues such as repatriation of artifacts.

HIST 7545 - Seminar in Management of Collections for Historical Organizations and Archives
3 credit hours Examines theory and practice of collection management practices in archives and museums; designed to prepare students to manage archives and museum collections in a variety of cultural institutions.

HIST 7550 - Seminar: American Material Culture
3 credit hours Intensive study of cultural heritage resources available in the local community and methods for identifying, analyzing, and incorporating them into existing social studies and history courses.

HIST 7551 - Seminar: American Architectural History
3 credit hours In-depth, field-based exploration of the historiography, research questions, literature, and methodology of American architectural history designed to prepare students to conduct research and to prepare resource documentation to current professional standards.

HIST 7555 - Archaeology and Public History
3 credit hours Explores the relationship between archaeological research and public history with an emphasis on methodology, theory, and interpretation and how to ethically and effectively communicate conclusions to the public.

HIST 7610 - Essentials of Historic Preservation and Cultural Resource Management
3 credit hours Regulatory policies and procedures employed by federal, state, and local agencies in the work of identifying, evaluating, recording, preserving, and managing the historical, architectural, and cultural resources of the United States. Emphasis on implementing the National Historic Preservation Act and the documentation requirements of the National Register of Historic Places.

HIST 7615 - Essentials of Archival Management
3 credit hours Examines major concepts, vocabulary, standards, professional ethics, and current issues in archival management. Includes readings, class discussions, and in-class exercises supplemented by guest lectures, field trips, and a field project.

HIST 7620 - Seminar in Archival Management
3 credit hours In-depth study of the nature of records and record keeping, communication and information

management theory, and the seven domains of archival practice through lectures, readings, discussion, and research. Also addresses the impact of emerging technologies on archival management.

HIST 7640 - Dissertation Research
1 to 6 credit hours Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled student should register for at least one credit hour of doctoral research each semester until completion. S/U grading.

HIST 7710 - Essentials of Public Archaeology
3 credit hours Explores the disciplinary history, professional ethics, key concepts and debates, and best practices of public archaeology in the U.S. with emphasis on historical archaeology's contributions to American historiography, its relationship to cultural resource management and heritage legislation, and current issues in shared authority with diverse public audiences.

HIST 7720 - Field Methods in Public Archaeology
6 credit hours A combined archaeological field school and internship in public history. Students gain practical experience in the public excavation of an historic site with emphasis on standard best practices in professional ethics and archaeological methods.

HIST 7730 - Research Methods in Public Archaeology
3 credit hours Lab intensive. Explores artifact analysis and interpretation, spatial data analysis, and archaeological report-writing through practical experience within an ongoing research project.

HIST 7870 - Archaeological Fieldwork for Public Historians
3 credit hours Archaeological practicum for students including the collection, recording, processing and interpretation of material culture as it relates to the understanding of historical societies.

HIST 7910 - Selected Studies in American History
3 credit hours Intensive reading on a carefully defined topic in American history to be selected by the student in conference with the instructor. May be taken more than once for credit.

HIST 7920 - Selected Studies in European History
3 credit hours Intensive reading on a carefully defined topic in European history to be selected by the student in conference with the instructor. May be taken more than once for credit.

HIST 7930 - Selected Studies in Global History
3 credit hours Intensive reading on a carefully defined topic in global history to be selected by the student in conference with the instructor. May be taken more than once for credit.

HIST 7940 - History Abroad
1 to 3 credit hours Examines historical issues while participating in an educational abroad program. In addition to readings, this experiential learning experience will utilize resources such as historic sites, museums, archaeological sites, and archives while abroad.

HIST 7950 - History Internship
1 to 3 credit hours Students given careful supervision in actual teaching experiences.

HIST 7960 - History Internship
1 to 3 credit hours Students given careful supervision in actual teaching experiences.

HIST 7991 - Professional Residency Colloquium
6 credit hours Students participate in a colloquium in conjunction with an assignment to a professional residency at one of the centers of excellence or at an institution of similar national reputation. Participants meet at least once each month, in sessions open to faculty and staff, to analyze common readings and individual/group projects.

HIST 7992 - Professional Residency Colloquium
6 credit hours Students participate in a colloquium in conjunction with an assignment to a professional residency at one of the centers of excellence or at an institution of similar national reputation. Participants meet at least once each month, in sessions open to faculty and staff, to analyze common readings and individual/group projects.

HIST 7993 - Current Issues in Public History Practice
3 credit hours Examines timely issues of public history practice in depth with a nationally recognized scholar in the field of historic preservation, cultural resources management, museum management, or other area of professional practice.

HIST 7994 - Advanced Projects in Public History
3 credit hours Provides individualized, advanced training in historic preservation, cultural resources management, museum management, archival management, oral history, public archaeology, or other areas of public history practice.

Music

Jennifer Vanatta-Hall, Interim Director
(615) 898-2469
www.mtsu.edu/music/
The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.

Music, Collaborative Piano Specialization, M.M.

Joseph Morgan, Program Director
(615) 904-8043
joseph.morgan@mtsu.edu
The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation.

Additionally, those seeking a specialization in collaborative piano must complete an audition. Applicants who do not pass the audition may be allowed, at the discretion of the faculty, to be admitted as non-degree seeking for one semester and must register for MUAP 5020 - Private Instruction. They must re-audition at the end of their first semester of study. Students who do not pass the audition on their second attempt will not be admitted to the program.

Degree Requirements

The Master of Music degree in Music with a specialization in collaborative music requires completion of a minimum of 30 semester hours.
Candidates must

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once.

Additionally, those with a specialization in collaborative piano must establish proficiencies before graduation in music history, music theory,* and foreign language. The foreign language proficiency for collaborative piano includes translation skills (in two of Italian, French, German) and diction skills and IPA in Italian, French, and German.
NOTE: Diagnostic examinations in music theory, music history, and diction will be scheduled during the first week of the first semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Additional courses may be required to satisfy these proficiency requirements.

Curriculum: Music, Collaborative Piano

The following illustrates the coursework requirements.

Core Courses (9 hours)

- MUS 6620 - Bibliography and Research **3 credit hours**
- MUS 6630 - Music Seminar **3 credit hours**
- MUTH 6050 - Analytical Techniques **3 credit hours**

Specialization Courses (12 hours)

- MUAP 6682 - Private Instruction Piano **3 credit hours**
- MUAP 6692 - Private Instruction Piano **3 credit hours**
- MUAP 6670 - Graduate Recital **3 credit hours** (two semesters**, 6 credit hours total**)
  NOTE: ***The vocal and instrumental repertoire may be split between the two recitals in any combination, as long as the final result is approximately 50 percent in each area.***

Guided Electives (9 hours)

- MUHL 5710 - Vocal Literature **3 credit hours**
- MUHL 5770 - Opera Literature **3 credit hours**
- MUHL 5780 - Chamber Music for Keyboard **3 credit hours**

Proficiency Courses Determined by Placement Examination (0-14 hours)

Either or both of these courses may be required based on the results of the student's diagnostic examinations in music history and music theory:

- MUTH 5010 - Theory Survey **3 credit hours**
- MUHL 5070 - Music History Survey **1 to 3 credit hours (3 credit hours required)**

Additional Study

In addition, the equivalent of one year of foreign language study in two of Italian, German, and French must be demonstrated. To satisfy this proficiency, up to four of the following courses may be required:

- ITAL 1010 - Elementary Italian I **3 credit hours**
- ITAL 1020 - Elementary Italian II **3 credit hours**
- GERM 1010 - Elementary German I **3 credit hours**
- GERM 1020 - Elementary German II **3 credit hours**
- FREN 1010 - Elementary French I **3 credit hours**
- FREN 1020 - Elementary French II **3 credit hours**

Furthermore, based on the student's diagnostic examination in diction, up to four of the following courses may be required:

- MUPD 2180 - Diction for Singers I **2 credit hours**
- MUPD 2190 - Diction for Singers II **2 credit hours**
- MUPD 2200 - Diction for Singers III **2 credit hours**
- MUPD 2210 - Diction for Singers IV **2 credit hours**

Music, Conducting Specialization, M.M.

Joseph Morgan, Program Director
(615) 904-8043
joseph.morgan@mtsu.edu
The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.
Please see undergraduate catalog for information regarding undergraduate program.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation.

Additionally, those seeking a specialization in conducting must complete an audition. Applicants who do not pass the audition may be allowed, at the discretion of the faculty, to be admitted as non-degree seeking for one semester and must register for MUAP 5020 - Private Instruction. They must re-audition at the end of their first semester of study. Students who do not pass the audition on their second attempt will not be admitted.

Degree Requirements

The Master of Music degree in Music with a specialization in conducting requires completion of a minimum of 30 semester hours.
Candidates must

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once.

Additionally, those with a specialization in conducting must establish proficiencies in music history, music theory,* and keyboard.
*** *NOTE: Diagnostic examinations in music theory and music history will be scheduled during the first week of the first semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Additional courses may be required to satisfy these proficiency requirements.***

Curriculum: Music, Conducting

The following illustrates the coursework requirements.

Core Courses (9 hours)

- MUS 6620 - Bibliography and Research **3 credit hours**
- MUTH 6050 - Analytical Techniques **3 credit hours**
- MUS 6630 - Music Seminar **3 credit hours**

Specialization Courses (18-20 hours)

- MUS 6030 - Conducting Problems and Score Interpretation **3 credit hours**
- MUS 6060 - Advanced Conducting **3 credit hours**
- MUAP 6709 - Private Instruction Conducting **3 credit hours**
- Two ensembles at the 5000 level, 1 credit hour each, **2 credit hours**
- MUAP 6670 - Graduate Recital **3 credit hours**

For Instrumental Conductors

- MUHL 5790 - Orchestral and Wind Ensemble Literature **3 credit hours**
- MUED 5240 - Instrumental Rehearsal Problems **3 credit hours**

For Choral Conductors

- MUHL 5680 - Choral Literature **2 credit hours**
- MUTH 5270 - Choral Arranging **2 credit hours**

Electives (1-3 hours)

Proficiency Courses Determined by Placement Examination (0-6 hours)

Either or both of these courses may be required based on the results of the student's diagnostic examinations in music history and music theory:

- MUTH 5010 - Theory Survey **3 credit hours**
- MUHL 5070 - Music History Survey **1 to 3 credit hours (3 credit hours required)**

Keyboard proficiencies are evaluated by the student's primary conducting professor.

Music, Jazz Studies Specialization, M.M.

Joseph Morgan, Program Director
(615) 904-8043
joseph.morgan@mtsu.edu
The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in Music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation.

Additionally, those seeking a specialization in jazz studies must complete an audition. Applicants who do not pass the audition may be allowed, at the discretion of the faculty, to be admitted as non-degree seeking for one semester and must register for MUAP 5020 - Private Instruction. They must re-audition at the end of their first semester of study. Students who do not pass the audition on their second attempt will not be admitted to the program.

Degree Requirements

The Master of Music degree in Music with a specialization in jazz studies requires completion of 32 semester hours. Candidates must

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once.

Additionally, those with a specialization in jazz studies must establish proficiencies in music history and music theory*.
****NOTE: Diagnostic examinations in music theory and music history will be scheduled during the first week of the first semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Additional courses may be required to satisfy these proficiency requirements.***

Curriculum: Music, Jazz Studies

The following illustrates the coursework requirements.

Core Courses (9 hours)

- MUS 6620 - Bibliography and Research **3 credit hours**
- MUTH 6050 - Analytical Techniques **3 credit hours**
- MUS 6630 - Music Seminar **3 credit hours**

Specialization Courses (14 hours)

- MUAP 668_ - Private Instruction, **3 credit hours**
- MUAP 669_ - Private Instruction, **3 credit hours**
- MUAP 670_ - Private Instruction, **3 credit hours**
- MUAP 6670 - Graduate Recital **3 credit hours**
- Two ensembles (Jazz Ensemble or Jazz Combo) 1 credit hour each, **2 credit hours**

Guided Electives (9 hours)

Three courses to be selected from the following:

- MUHL 5530 - History of Jazz **3 credit hours**
- MUPD 6330 - Jazz Pedagogy and Program Administration **3 credit hours**
- MUTH 5280 - Advanced Jazz Arranging **3 credit hours**
- MUTH 6060 - Advanced Improvisation **3 credit hours**

Proficiency Courses Determined by Placement Examination (0-6 hours)

Either or both of these courses may be required based on the results of the student's diagnostic examinations in music history and music theory:

- MUTH 5010 - Theory Survey **3 credit hours**
- MUHL 5070 - Music History Survey **1 to 3 credit hours (3 credit hours required)**

Music, Music Composition Specialization, M.M.

Joseph Morgan, Program Director
(615) 904-8043
joseph.morgan@mtsu.edu
The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation.

Additionally, those seeking a specialization in music composition must submit recordings and scores of three to five of their compositions.

Degree Requirements

The Master of Music degree in Music with a specialization in music composition requires completion of 33 semester hours.
Candidates must

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once.

Additionally, those with a specialization in music composition must establish proficiencies in music history and music theory* and establish proficiency in a performance skill on an applied instrument or voice and in keyboard (may also fulfill performance-skill requirement).
****NOTE: Diagnostic examinations in music theory and music history will be scheduled during the first week of the first semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Additional courses may be required to satisfy these proficiency requirements.***

Curriculum: Music, Music Composition

The following illustrates the coursework requirements.

Core Courses (9 hours)

- MUS 6620 - Bibliography and Research **3 credit hours**
- MUTH 6050 - Analytical Techniques **3 credit hours**
- MUS 6630 - Music Seminar **3 credit hours**

Specialization Courses (18 hours)

- MUAP 6140 - Composition **3 credit hours**
- MUAP 6150 - Composition **3 credit hours**
- MUAP 6160 - Composition **3 credit hours**
- MUAP 6670 - Graduate Recital **3 credit hours**
- MUHL 6040 - Twentieth Century Music **3 credit hours**
- MUTH 5190 - Principles and Practices of Electronic Music **3 credit hours**

Electives (6 hours)

- Free electives (6 hours)

Proficiency Courses Determined by Placement Examination (0-6 hours)

Either or both of these courses may be required based on the results of the student's diagnostic examinations in music history and music theory:

- MUTH 5010 - Theory Survey **3 credit hours**
- MUHL 5070 - Music History Survey **1 to 3 credit hours (3 credit hours required)**

Performance proficiencies are evaluated by the appropriate performance faculty. Keyboard proficiencies are evaluated by the student's primary composition professor.

Music, Music Education Specialization, M.M.

Joseph Morgan, Program Director
(615) 904-8043
joseph.morgan@mtsu.edu

The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.

The specialization in Music Education is designed for music educators who are currently teaching in K-12 music settings. All courses are taught in a fully online, learning environment, and the program requires completion of a minimum of 33 semester hours.

Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Additionally, those seeking a specialization in music education must be concurrently teaching in a K-12 music setting while enrolled in the program.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicants must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three letters of recommendation.

Additionally, those seeking a specialization in music education must submit a 30-minute video recording (in English) of themselves teaching music.

Degree Requirements

The Master of Music degree in Music with a specialization in music education requires completion of 33 semester hours.

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once.

NOTE:

NOTE: A comprehensive written exam will be administered with Examity online exam proctoring, and a comprehensive oral exam will be administered via Zoom.

Curriculum: Music, Music Education

The following illustrates the coursework requirements.

Core Courses (9 hours)

- MUED 6340 - Music Education Seminar **3 credit hours**
- MUED 6620 - Bibliography and Research in Music Education **3 credit hours**
- MUTH 6040 - Music Theory Pedagogy **3 credit hours**

Specialization Courses (24 hours)

- MUED 6010 - Foundations of Music Education **3 credit hours**
- MUED 6621 - Music Education Research Project **3 credit hours**
- MUED 6633 - Contemporary Issues in Music Education **3 credit hours**
- MUED 6642 - Evaluation and Assessment in Music Education **3 credit hours**

- MUED 6050 - Policy and Advocacy in Music Education **3 credit hours**

Nine (9) hours selected from the following:

- MUED 5260 - The Application of Technology to Music Teaching **3 credit hours**
- MUED 5270 - Strategies for Teaching Middle and High School Choirs **3 credit hours**
- MUED 5280 - Vernacular Music Education **3 credit hours**
- MUS 5250 - Psychology of Music **3 credit hours**

Music, Musicology Specialization, M.M.

Joseph Morgan, Program Director
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The School of Music offers a Master of Music degree in Music with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.
3. submit three letters of recommendation.

Additionally, those seeking a specialization in musicology must submit two (2) research papers of at least five (5) pages in length, one of which is on a music topic.

Degree Requirements

The Master of Music degree in Music with a specialization in musicology requires completion of 30 semester hours. Candidates must

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once;
3. Additionally, those with a specialization in musicology must establish proficiencies in music history, music theory*, and foreign language. Musicologists must establish proficiency in one of the following languages: French, German, or Italian.

NOTE:** ***Diagnostic examinations in music theory and music history will be scheduled during the first week of the semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Additional courses may be required to satisfy these proficiency requirements.

Curriculum: Music, Musicology

The following illustrates the coursework requirements.

Core Courses (9 hours)

- MUS 6620 - Bibliography and Research **3 credit hours**
- MUTH 6050 - Analytical Techniques **3 credit hours**
- MUS 6630 - Music Seminar **3 credit hours**

Specialization Courses (12 hours)

- Two additional semesters of MUS 6630 Music Seminar **(6 credit hours)**
- Course at the 6000 level in a related field (must be approved by the graduate coordinator) **(3 credit hours)**
- MUS 6640 - Thesis Research **1 to 6 credit hours (3 credit hours**)

Elective Courses (9 hours)

Proficiency Courses Determined by Placement Examination (0-12 hours)

Either or both of these courses may be required based on the results of the student's diagnostic examinations in music history and music theory:

- MUTH 5010 - Theory Survey **3 credit hours**
- MUHL 5070 - Music History Survey **1 to 3 credit hours**

Additional Study

Students in the musicology specialization must demonstrate reading knowledge or the equivalent of one year of collegiate study of a foreign language (French, Italian, German, or another language approved by the musicology faculty). To satisfy this proficiency, up to two of the following courses may be required:

- ITAL 1010 - Elementary Italian I **3 credit hours**
- ITAL 1020 - Elementary Italian II **3 credit hours**
- GERM 1010 - Elementary German I **3 credit hours**
- GERM 1020 - Elementary German II **3 credit hours**
- GERM 5990 - German for Reading Knowledge **3 credit hours**
- FREN 1010 - Elementary French I **3 credit hours**
- FREN 1020 - Elementary French II **3 credit hours**
- FREN 5990 - French for Reading Knowledge **3 credit hours**

Music, Performance Specialization, M.M.

Joseph Morgan, Program Director
(615) 904-8043
joseph.morgan@mtsu.edu
The School of Music offers a Master of Music degree with specializations in collaborative piano, conducting, jazz studies, music composition, music education, musicology, and performance.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Music degree program requires

1. an earned bachelor's degree in music from an accredited university or college;
2. an acceptable grade point average in all college work taken (at least 3.00).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work.
3. submit three letters of recommendation.

Additionally, those seeking a specialization in performance must complete an audition. Applicants who do not pass the audition may be allowed, at the discretion of the faculty, to be admitted as non-degree seeking for one semester and must register for MUAP 5020 - Private Instruction. They must re-audition at the end of their first semester of study. Students who do not pass the audition on their second attempt will not be admitted to the program.

Degree Requirements

The Master of Music degree in Music with a specialization in performance requires completion of a minimum of 32 semester hours.
Candidates must

1. complete the curriculum with 70 percent of the total degree hours at the 6000 level (see Curriculum section below for specifics);
2. successfully complete both written and oral comprehensive examinations no earlier than the student's last semester of study. Comprehensive examinations may be repeated once.

Additionally, those with a specialization in performance must establish proficiencies in music history and music theory.* Vocalists must also establish proficiency in diction and in two languages from among French, German, and Italian.
NOTE: Diagnostic examinations in music theory, music history, and diction will be scheduled during the first week of the first semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Additional courses may be required to satisfy these proficiency requirements.

Curriculum: Music, Performance

The following illustrates the minimum coursework requirements.

Core Courses (9 hours)

- MUS 6620 - Bibliography and Research **3 credit hours**
- MUTH 6050 - Analytical Techniques **3 credit hours**
- MUS 6630 - Music Seminar **3 credit hours**

Specialization Courses (20 hours)

- MUAP 668_ - Private Instruction, **3 credit hours**
- MUAP 669_ - Private Instruction, **3 credit hours**
- MUAP 670_ - Private Instruction, **3 credit hours**
- MUAP 6670 - Graduate Recital **3 credit hours**
- Two ensembles, 1 credit hour each, **2 credit hours**
- Music literature courses **6 credit hours**

Elective Courses (3 hours)

Proficiency Courses Determined by Placement Examination (0-14 hours)

Either or both of these courses may be required based on the results of the student's diagnostic examinations in music history and music theory:

- MUTH 5010 - Theory Survey **3 credit hours**
- MUHL 5070 - Music History Survey **1 to 3 credit hours (3 credit hours required)**

Additional Study

For vocalists only: In addition, the equivalent of one year of foreign language study in two of Italian, German, and French must be demonstrated. To satisfy this proficiency, up to four of the following courses may be required:

- ITAL 1010 - Elementary Italian I **3 credit hours**
- ITAL 1020 - Elementary Italian II **3 credit hours**
- GERM 1010 - Elementary German I **3 credit hours**
- GERM 1020 - Elementary German II **3 credit hours**
- FREN 1010 - Elementary French I **3 credit hours**
- FREN 1020 - Elementary French II **3 credit hours**

For vocalists only: Furthermore, based on the student's diagnostic examination in diction, up to four of the following courses may be required:

- MUPD 2180 - Diction for Singers I **2 credit hours**
- MUPD 2190 - Diction for Singers II **2 credit hours**
- MUPD 2200 - Diction for Singers III **2 credit hours**
- MUPD 2210 - Diction for Singers IV **2 credit hours**

Applied Music

MUAP 5020 - Private Instruction
2 credit hours One hour lesson weekly on one of the various instruments or voice. Offers preparation to entering graduates for the graduate audition. Does not count toward the graduate degree; may be repeated.

MUAP 5040 - Service Playing
2 credit hours Skills and knowledge necessary for playing for church services including hymn and anthem accompaniments, conducting from the console, study of liturgical service music, solo accompaniments, and church music materials.

MUAP 5100 - Private Instruction
1 credit hours Prerequisite: Permission of instructor. One half-hour private lesson weekly on one of the various instruments or voice. May be repeated.

MUAP 5140 - Composition
2 credit hours Prerequisite: Permission of instructor. Experience composing original works in numerous media and styles to develop technique and self-expression. May be repeated.

MUAP 6140 - Composition
3 credit hours Development of skills and ability in handling musical materials with goals of some individual style or expression within the framework of current practices. Taken in consecutive order with MUAP 6150 and MUAP 6160.

MUAP 6150 - Composition
3 credit hours Development of skills and ability in handling musical materials with goals of some individual style or expression within the framework of current practices. Taken in consecutive order with MUAP 6140 and MUAP 6160.

MUAP 6160 - Composition
3 credit hours Development of skills and ability in handling musical materials with goals of some individual style or expression within the framework of current practices. Taken in consecutive order with MUAP 6140 and MUAP 6150. MUAP 6160 may be repeated with no limit, but only three hours of credit may be applied toward the degree.

MUAP 6670 - Graduate Recital
3 credit hours Prerequisites: Completion of MUAP 6682 for the collaborative piano specializations; MUS 6030, MUS 6060, and MUAP 6709 for the conducting specialization; the appropriate courses from among MUAP 6681-MUAP 6688, MUAP 6691-MUAP 6698, and MUAP 6701-MUAP 6708 for the jazz studies and performance specializations; MUAP 6140, MUAP 6150, and MUAP 6160 for the music composition and music composition for contemporary media specializations; and permission of the appropriate music faculty in all specializations. One-hour private lesson per week in the selected performance field and recital preparation until recital completed. Those specializing in collaborative piano may take course three times.

MUAP 6681 - Private Instruction Voice
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6682 - Private Instruction Piano
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6683 - Private Instruction Organ
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6684 - Private Instruction Brass
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6685 - Private Instruction Winds
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6686 - Private Instruction Strings
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6687 - Private Instruction Percussion
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6688 - Private Instruction Guitar
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6690 - Private Instruction
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6691 - Private Instruction Voice
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6692 - Private Instruction Piano
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6693 - Private Instruction Organ
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6694 - Private Instruction Brass
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6695 - Private Instruction Winds
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6696 - Private Instruction Strings
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6697 - Private Instruction Percussion
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6698 - Private Instruction Guitar
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

MUAP 6700 - Private Instruction
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6701 - Private Instruction Voice
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6702 - Private Instruction Piano
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6703 - Private Instruction Organ
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6704 - Private Instruction Brass
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6705 - Private Instruction Winds
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6706 - Private Instruction Strings
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6707 - Private Instruction Percussion
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6708 - Private Instruction Guitar
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

MUAP 6709 - Private Instruction Conducting
3 credit hours Prerequisite: Completion of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.

Music

MUS 5000 - Special Topics in Music
1 to 3 credit hours Study of a topic in music. Topic and prerequisites to be announced.

MUS 5100 - Independent Study in Music
1 to 3 credit hours Intensive study of a chosen subject. An indication of reasonable skill and knowledge of research techniques, writing, and creativity expected.

MUS 5250 - Psychology of Music
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Examines research in areas related to music cognition, including music perception, music performance, musical affect, musical preference, and social psychology. Explores how this research relates to practice in music education and performance. Offered in spring semesters.

MUS 5270 - Music Internship
3 to 6 credit hours Prerequisite: Permission of instructor. Examination and experiences in either the area of music industry, music education, or instrumental or choral conducting. Three credits require 15 hours per week; six credits, 30 hours per week. S/U grading.

MUS 5570 - The Body Intelligent: A Study of the Alexander Technique
3 credit hours (Same as THEA 5570 .) For those interested in improving ease and freedom of movement, balance, support, flexibility, and coordination in daily activity.

MUS 6000 - Special Topics in Music
1 to 3 credit hours Study of a topic in music. Topic and prerequisites to be announced.

MUS 6030 - Conducting Problems and Score Interpretation
3 credit hours Analysis and marking of scores. Refinement of conducting techniques. Elimination of undesirable conducting habits. Diction as applied to conducting.

MUS 6060 - Advanced Conducting
3 credit hours Techniques in advanced conducting of orchestral, choral, band, and chamber ensembles. Includes irregular meters, score reading, warm-up procedures, conducting patterns, attacks, and releases.

MUS 6100 - Independent Study in Music
1 to 3 credit hours Intensive study of a chosen subject. An indication of reasonable skill and knowledge of research techniques, writing, and creativity expected.

MUS 6360 - Music Industry Mindset
3 credit hours Creation, examination, and experience in developing and implementing a business plan in the selected areas of the music business. Includes studio teaching, freelance musicianship, contracting, performing, producing, nonprofit organizations, and similar areas of specialization in music.

MUS 6500 - Aesthetics of the Arts
3 credit hours The place of aesthetics in philosophy, the properties of music and the visual arts, the alternative and corollary views of the arts, the process of aesthetic creation, and meaning and values in music and the visual arts.

MUS 6620 - Bibliography and Research
3 credit hours Survey of bibliography and problems and methods of research. Analysis and evaluation of research in the arts.

MUS 6630 - Music Seminar
3 credit hours Prerequisite: MUS 6620. Study and research of a topic in music determined by the instructor.

MUS 6640 - Thesis Research
1 to 6 credit hours Types of research in music surveyed. A problem is selected and developed into a thesis report in acceptable form and style. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

MUS 6650 - Special Topics in Music
1 to 3 credit hours Study topic in music. Topics and prerequisites to be announced.

MUS 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students enrolled in another graduate course who will take the master's comprehensive examination during the term. Contact the graduate advisor during the first two weeks of the term for course details and specifics. Credit may not be applied to degree requirements.

Music Education

MUED 5190 - General Music in the Middle and Senior High School
3 credit hours Introduces graduate students in music education to methods and materials available for teaching general music to students in grades 6-12. Active student participation and observations of music teachers in the school expected.

MUED 5210 - General Music Program K to 6
3 credit hours The role of music and music teaching in elementary education; its objectives, methods, materials, and procedures; innovative trends and exemplary practices; evaluative techniques.

MUED 5220 - Choral Music in the Middle and Senior High School
3 credit hours Methods for teaching music to students at the middle and senior high levels (grades 5-12). Topics include recruitment, auditions, repertoire, programming, musical analysis and score preparation, planning rehearsals, rehearsing the choir, classroom management, vocal techniques and musicianship skills, changing voice, and overall management of a choral program. Observation and public school field experiences required.

MUED 5230 - Secondary School Methods and Materials
2 credit hours The role of music and music teaching in secondary education; its objectives, methods, materials, and procedures; innovative trends and exemplary practices; evaluative techniques.

MUED 5240 - Instrumental Rehearsal Problems
3 credit hours Improving teaching in instrumental music classes through a study of rehearsal planning and techniques; the interpretation of music to students; group dynamics.

MUED 5250 - Advanced Marching Techniques
3 credit hours Prerequisite: Marching band class. Further development and application of marching band techniques as utilized in half-time and contest show production. Selection and analysis of the music score.

MUED 5260 - The Application of Technology to Music Teaching
3 credit hours Introduces music technology and its applications in music education. Topics include electro-acoustical generation of musical sound, synthesis equipment and MIDI networks, sequencing and scoring software, music education instructional software, and recording techniques. Application assignments in the computer lab and reading assignments in references and software and hardware manuals. Students will search for, examine, and log relevant World Wide Web and other Internet sites. Offered in fall and summer semesters.

MUED 5270 - Strategies for Teaching Middle and High School Choirs
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Focuses on strategies that can be implemented in curriculum development, lesson planning, and assessment of music learning in the middle and high school choral setting. Implementation of the Artistic Domains of Perform, Create, Respond, and Connect in the choral classroom. Offered in fall, spring, and/or summer semesters.

MUED 5280 - Vernacular Music Education
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Issues, teaching materials, and techniques involved in incorporating American folk and popular music and related world music

repertoires in K-12 classroom instruction. Offered in fall and summer semesters.

MUED 5670 - Music for the Young Child
3 credit hours Music fundamentals, materials, and methods appropriate for preschool through grades three; pantomime, role playing, improvisation, rhythm, movement, listening, and singing.

MUED 6010 - Foundations of Music Education
3 credit hours Philosophies of music education; meaning in music and aesthetic theories; principles of learning; objectives for music education. Offered in fall semesters.

MUED 6050 - Policy and Advocacy in Music Education
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Addresses educational policies at the local, state, and federal level; policy analysis frameworks; and approaches to music education advocacy. Offered in summer sessions.

MUED 6340 - Music Education Seminar
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Survey of current educational pedagogy, methods, and materials with application to teaching through research, seminar discussion, and readings in music education literature. Offered fall semesters.

MUED 6620 - Bibliography and Research in Music Education
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Survey of bibliography and methods of research in music education. Analysis and evaluation of research in the field of music education. Offered in fall, spring, and/or summer semesters.

MUED 6621 - Music Education Research Project
3 credit hours Prerequisite: MUS 6620 and completed candidacy form. Study and research of a topic in music education determined by the student. S/U grading. May be repeated up to a maximum of 6 credit hours. Offered in summer semesters.

MUED 6632 - Contemporary Issues and Research in Music Education
3 credit hours Focuses on contemporary issues and research in music education, the current educational landscape, learning theory and music education, curriculum design and assessment, and accountability in music education.

MUED 6633 - Contemporary Issues in Music Education
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Focuses on contemporary issues in music education, the current educational landscape, learning theory and music education, curriculum design, educational policy, and accountability in music education.

MUED 6642 - Evaluation and Assessment in Music Education
3 credit hours Focuses on effective evaluation and assessment strategies for the K-12 music education classroom, how assessment data may be most effectively used to improve music teaching and learning, and the current research priorities for assessment in music education. Offered in spring semesters.

Music Ensembles

MUEN 5100 - The Band of Blue Marching Band
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5110 - Symphonic Band
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5130 - Tennessee Valley Winds
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5200 - Concert Chorale
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5210 - Meister Singers
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5220 - Women's Chorus
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5240 - MTSU Singers
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5260 - University Chorus
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5300 - Accompanying
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5312 - Wind Ensemble
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5323 - Schola Cantorum
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5325 - Opera Theater
1 credit hours Preparation and public performance of opera. Technical and performing aspects of opera production as they pertain to light and grand opera.

MUEN 5330 - Symphony Orchestra
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5340 - Jazz Ensemble
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5343 - Jazz Combos
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5350 - Percussion Ensemble
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5360 - Concert Orchestra
1 credit hours Preparation and performance of outstanding symphonic literature. (No audition required.)

MUEN 5371 - Brass Chamber Ensembles
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5372 - Guitar Chamber Ensembles
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5373 - Piano Chamber Ensembles
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5374 - String Chamber Ensembles
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5375 - Woodwind Chamber Ensembles
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5410 - Salsa Band
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5420 - Commercial Music Ensemble
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5700 - Mixed Chamber Ensemble
1 credit hours Study and public performance of music literature appropriate to the ensemble.

MUEN 5760 - Chinese Music Ensemble
0 to 1 credit hours Learning and performing Chinese musical instruments. (No audition required.)

MUEN 6420 - Commercial Music Ensemble
1 credit hours Acquaints the student with the rehearsal and performance of commercial music.

Music History and Literature

MUHL 5050 - Church Music
2 credit hours Survey of church music and various denominational worship traditions, hymnology, graded choir programs, handbell choirs, materials and methods of church music, and administration and organization of church music.

MUHL 5060 - Guitar Literature
3 credit hours Basic literature for the guitar from the Renaissance to the present. Analysis, listening, research, performance.

MUHL 5070 - Music History Survey
1 to 3 credit hours Review of music in history and culture to degree necessary for candidate to pursue work on graduate level. Does not count toward the M.M. in Music. May count toward satisfying proficiencies for the Master of Music. S/U grading.

MUHL 5130 - Survey of World Music
3 credit hours A study of selected music of cultures from around the world and here at home. Listening, watching, reading, research, and concert attendance required.

MUHL 5140 - Music of the Middle East
3 credit hours Examines various Middle Eastern cultural soundscapes from an ethnomusicological perspective, including the relationship between folk, classical, and popular musical traditions and music's role in religious expression.

MUHL 5530 - History of Jazz
3 credit hours Study of the history and literature of jazz music including African roots, developments, and aspects of style periods, and the contemporary state of jazz. Listening and analysis.

MUHL 5540 - History of Black Gospel Music
3 credit hours Historical and cultural survey of black gospel music in West African and European American antecedents to the present.

MUHL 5550 - Hip-hop Music and Culture
3 credit hours An ethnomusicological investigation of how hip-hop reacts to and informs mainstream culture through its primary art forms: music, visual art, and dance. Students will identify and address major themes and issues that cut across hip-hop's history, including issues of style and performance, gender, race, politics, and religion.

MUHL 5630 - Seventeenth and Eighteenth Century Music
3 credit hours Prerequisite: Permission of instructor. A survey of Western classical music during the Baroque and Classical periods; emphasis on topics selected by the instructor.

MUHL 5640 - Nineteenth Century Music
3 credit hours Prerequisite: Permission of instructor. A survey of Western classical music during the Romantic period; emphasis on topics selected by the instructor.

MUHL 5660 - American Music
3 credit hours Prerequisite: Permission of instructor. A survey of American music from the colonial era to the present; added emphasis on topics selected by the instructor. Examines folk, popular, and art music, as well as sacred and secular traditions within their cultural contexts.

MUHL 5680 - Choral Literature
2 credit hours Examines choral literature from the Renaissance to the present. Program selection. Analysis of choral pieces.

MUHL 5690 - Piano Literature
3 credit hours Survey of the basic literature of the harpsichord and piano from the eighteenth century to the present. Live performance; analysis and research.

MUHL 5710 - Vocal Literature
3 credit hours Basic repertory of Italian airs, German lieder, French art song, and solo vocal works of nationalistic schools, as well as English and American song literature.

MUHL 5720 - Organ Literature
2 credit hours A chronological study of organ literature from the Medieval period to the present. Objectives include knowledge of the repertoire and composers and historical perspective of styles and organ building.

MUHL 5730 - Brass Literature
2 credit hours A chronological study of brass literature from the Renaissance period to the present. Objectives include knowledge of the repertoire and composers, historical perspective of styles, types, and common performance practice.

MUHL 5740 - Percussion Literature
2 credit hours A chronological study of percussion literature from the nineteenth century to the present. Objectives include knowledge of the repertoire and composers, historical perspective of styles, types, and common performance practice.

MUHL 5750 - String Literature
2 credit hours A chronological study of string literature from the nineteenth century to the present. Objectives include knowledge of the repertoire and its composers, historical perspective of styles, types, and common performance practice.

MUHL 5760 - Woodwind Literature
2 credit hours A chronological study of woodwind literature from the Renaissance period to the present. Objectives include knowledge of the repertoire and composers, historical perspective of styles, types, and common performance practice.

MUHL 5770 - Opera Literature
3 credit hours A study of major operatic works and styles. Focuses on composers, librettists, and performers as well as the vocal, musical, and dramatic resources necessary for performance. Listening and analysis of select pieces will be included in student projects.

MUHL 5780 - Chamber Music for Keyboard
3 credit hours A study of chamber music written for the piano. Emphasis will be placed on music written during the eighteenth, nineteenth, and twentieth centuries. Listening and analysis of select pieces will be included in student projects.

MUHL 5790 - Orchestral and Wind Ensemble Literature
3 credit hours An in-depth study of orchestral and wind ensemble repertoire.

MUHL 5800 - Art Music and African Americans
2 credit hours A chronological and topical overview of African American musicians and composers and the primary genres of African American art music from slavery to the present.

MUHL 5810 - Women in Music
3 credit hours Examines and celebrates women's musical activities in a variety of capacities and musical traditions through perspectives of a variety of gender theories. Approved for credit in Women's and Gender Studies Certificate program.

MUHL 5850 - Piano Literature I
3 credit hours Prerequisite: Permission of instructor. Surveys the basic literature of the harpsichord and the piano from the seventeenth century to the early nineteenth century. Live performance, analysis, and research.

MUHL 5860 - Piano Literature II
3 credit hours Prerequisite: MUHL 5850 or permission of the instructor. Surveys the basic literature of the piano from the nineteenth century to the present. Live performance, listening, analysis, and research.

MUHL 5870 - Harp Literature
2 credit hours Prerequisite: Permission of instructor. Survey of the standard literature of the single-action and double-action pedal harp from the 18th century to early 21st century. Live performance, analysis, and research.

MUHL 6040 - Twentieth Century Music
3 credit hours Styles and compositional techniques found in representative masterworks of the twentieth century from Debussy to present. Analysis, listening, and research.

Music Pedagogy

MUPD 5110 - Advanced Brass Pedagogy
2 credit hours Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced brass students.

MUPD 5120 - Advanced Percussion Pedagogy
2 credit hours Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced percussion students.

MUPD 5130 - Advanced String Pedagogy
2 credit hours Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced string students.

MUPD 5140 - Advanced Woodwind Pedagogy
2 credit hours Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced woodwind students.

MUPD 5150 - Advanced Harp Pedagogy
2 credit hours Prerequisite: Permission of instructor. Survey and examination of harp methods and schools of technique of the double-action pedal harp. Development of skills and concepts for teaching harp. Research, analysis, lesson observation, and supervised teaching.

MUPD 5300 - Diction for Singers II
3 credit hours Lecture demonstration course for familiarization with the International Phonetic Alphabet and correct pronunciation of a variety of texts in English, Italian, German, and French.

MUPD 5310 - Vocal Pedagogy
2 credit hours Teaching techniques of the fundamentals of singing. Vocalises and repertoire. Physical aspects of singing.

MUPD 5320 - Piano Pedagogy
2 credit hours Various technical and philosophical approaches in teaching piano. Examination of teaching repertory through intermediate level. Supervised teaching through intermediate level.

MUPD 5330 - Organ Pedagogy
2 credit hours The principles of teaching organ: manual and pedal techniques, organ methods, and organ repertoire of varying degrees of difficulty and of all period-styles from pre-Bach through twentieth century.

MUPD 5340 - Techniques of Vocal Coaching
2 credit hours Methods and techniques necessary for vocal coaching in a professional setting. Topics include the German Fach system, effective rehearsal techniques, playing of orchestral reductions, sight-reading, and repertoire building. Listening and in-class coaching sessions included.

MUPD 5350 - Guitar Pedagogy
2 credit hours Study of the theoretical and practical bases of teaching guitar.

MUPD 5360 - Piano Pedagogy I
2 credit hours Prerequisite: Permission of instructor. The various technical and philosophical approaches in teaching piano. Examines teaching repertory from beginning through the late-elementary levels. Supervised teaching.

MUPD 5370 - Piano Pedagogy II
2 credit hours Prerequisite: MUPD 4360 or permission of instructor. Examines intermediate-level teaching repertory. Develops skills and concepts for teaching intermediate-level students. Supervised teaching.

MUPD 5380 - Group Piano Pedagogy
1 credit hours Prerequisite: Permission of instructor. Examines class piano texts and materials. Development of skills and concepts for teaching class piano. Course observation and supervised teaching.

MUPD 6330 - Jazz Pedagogy and Program Administration
3 credit hours In-depth study of materials and techniques for teaching jazz at the high school and college level. Rehearsal techniques and identification of and solutions to performance problems. Study of the development and implementation of a successful jazz studies program including educational jazz festival administration.

MUPD 6340 - Woodwind Teaching
2 credit hours Seminar on problems encountered in advanced instruction of woodwinds. Experimentation and performance involving old and new concepts of performance.

MUPD 6350 - Brass Teaching
2 credit hours Teaching materials for trumpet, cornet, horn, trombone, baritone, and tuba; elementary and advanced exercises, etudes; methods for class and private instruction, clef and transposition studies, orchestral and band repertoire. Survey of sources providing announcement and evaluation of new materials.

Music Theory

MUTH 5010 - Theory Survey
3 credit hours A review of musicianship skills and knowledge of musical theory to the degree necessary for the candidate to pursue work at the graduate level. Does not count toward the M.M. in Music. S/U grading.

MUTH 5180 - Improvisation
2 credit hours Lecture demonstration course exploring improvisation, musical vocabularies, and shorthand including figured bass, Nashville shorthand, and other contemporary styles of writing and performing.

MUTH 5190 - Principles and Practices of Electronic Music
3 credit hours Includes history and techniques, acoustics, electronic sound generation, recording, operation of audio equipment, basic principles of composition, and experience with tape recorders and a music synthesizer. Open to nonmusic majors with permission of instructor.

MUTH 5270 - Choral Arranging
2 credit hours The fundamentals of arranging musical works for vocal ensembles of various sizes, combinations, and skill levels.

MUTH 5280 - Advanced Jazz Arranging
3 credit hours Prerequisite: MUTH 4170. Advanced analysis and arranging for various combinations of instruments and voice for small and large jazz

ensembles. Periods, performance practices, stylistic features, and artists.

MUTH 5290 - Electronic Music II
3 credit hours Prerequisite: MUTH 5190. Advanced principles of digital sound synthesis, programming the digital synthesizer, electronic composition, contemporary trends in digital music, and programming with a MIDI work station.

MUTH 5590 - MIDI Studio Techniques
3 credit hours Prerequisites: RIM/MUTH 4290 and RIM 4400 or permission of instructor. MIDI systems design and the total integration of all MIDI-controllable devices. SMPTE and MIDI Time Code and their application to tape synchronization. A continuation of advanced techniques for digital sampling, sequencing, sound manipulation, and use of alternate controllers. Other topics include sound effects and music scoring for film and video, and the MIDI Machine Control and MIDI Show Control specifications. Laboratory required.

MUTH 6040 - Music Theory Pedagogy
3 credit hours Prerequisite: Must be admitted to the Music, M.M. degree (music education specialization). Study of K-12 teaching techniques and current research in music theory pedagogy. Offered fall semesters.

MUTH 6050 - Analytical Techniques
3 credit hours Prerequisite: MUTH 5010 or permission of instructor. Skills and procedures of musical analysis as they apply to all periods through analysis of representative compositions. Evaluation of work from all standpoints: craftsmanship, expression, and stylistic correctness.

MUTH 6060 - Advanced Improvisation
3 credit hours Explores the art of improvisation. Emphasis on advanced harmonic and melodic principles and on the development of a personal style. Listening and analysis of solos by great jazz artists and in-class performances of student projects and improvisations.

Political Science and International Relations

Michael Federici, Chair
(615) 898-2708
www.mtsu.edu/politicalscience/
The Department of Political Science and International Relations offers a Master of Arts in International Affairs and a minor in Political Science.

International Affairs, M.A.

John Maynor, Program Director
(615) 494-8758
John.Maynor@mtsu.edu
www.mtsu.edu/maia
The Department of Political Science and International Relations offers the Master of Arts degree in International Affairs and a minor in Political Science at the graduate level.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Admission decisions are based upon consideration of a number of criteria which are believed to indicate a high potential in the graduate program.
Admission to the Master of Arts in International Affairs program requires

1. an earned bachelor's degree from an accredited university or college;
2. a minimum grade point average of 2.75 on a 4.00 scale for all college work taken.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applications are accepted on a rolling basis.
Applicant must

1. submit application with appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit three (3) letters of recommendation from professors or professionals that address the applicant's potential to successfully complete a master's program in International Affairs;
4. submit a statement of interest stating reason for applying to the program, academic interest, and professional goals.

Degree Requirements

The Master of Arts in International Affairs requires completion of a minimum of 30 semester hours.
Candidate must

1. complete at least 30 semester hours of graduate-level designated courses in international affairs, with at least 70 percent of the hours at the 6000 level;
2. successfully complete a professional portfolio including a practicum.

Curriculum: International Affairs

The following illustrates the minimum coursework requirements.

Thesis Option (30 hours)

Core Requirements (12 hours)

- PS 6100 - Theory and Practice I: International Relations **2 credit hours**
- PS 6200 - Theory and Practice II: Comparative Politics **2 credit hours**
- PS 6350 - International Affairs I: Concepts and Cases **3 credit hours**
- PS 6400 - International Affairs II: Governance and Transnational Issues **3 credit hours**
- PS 6550 - International Affairs III: Professional Skills and Methods **2 credit hours**
  NOTE: ***PS 6100, PS 6200, and PS 6550 are taken concurrently; PS 6350 and PS 6400 are taken concurrently.***

Guided Electives (12 hours)

- Advisor-approved graduate electives **12 credit hours**

Thesis (6 hours)

- PS 6170 - Literature Review in International Affairs **3 credit hours** AND
- PS 6640 - Thesis Research **1 to 3 credit hours (3 credit hours required)**

Non-thesis Option (30 hours)

Core Requirements (12 hours)

- PS 6100 - Theory and Practice I: International Relations **2 credit hours**
- PS 6200 - Theory and Practice II: Comparative Politics **2 credit hours**
- PS 6350 - International Affairs I: Concepts and Cases **3 credit hours**
- PS 6400 - International Affairs II: Governance and Transnational Issues **3 credit hours**
- PS 6550 - International Affairs III: Professional Skills and Methods **2 credit hours**
  NOTE: ***PS 6100, PS 6200, and PS 6550 are taken concurrently; PS 6350 and PS 6400 are taken concurrently.***

Guided Electives (12 hours)

- Advisor-approved graduate electives **12 credit hours**

Practicum (6 hours)

- PS 6290 - Practicum in International Affairs **1 to 6 credit hours (6 credit hours required)**

Political Science Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Political Science

PS 5030 - Human Rights
3 credit hours Aims to foster critical thinking about human rights, develop skills in weighing powerful but opposed arguments, and evaluate complex moral situations. Familiarization with the role of national and international organizations in human rights and global politics.

PS 5060 - The U.S. Congress
3 credit hours An analysis of the United States Congress. The origins of the Congress, political power, the nature of the institutionalized Congress, campaigns, elections.

PS 5070 - Political Violence and Terrorism
3 credit hours Political violence, assassination, terror, repression, and genocide examined in comparative and international perspective. Theoretical and case study approaches used to examine political violence forms, goals, tactics, and responses. Significant independent research component.

PS 5120 - Tennessee Government
3 credit hours Structure, functions, and processes of Tennessee's governmental and political institutions. Policy issues studied.

PS 5180 - Contemporary African Politics
3 credit hours Prerequisite: PS 1010 or permission of instructor. Comparative study of selected African political systems with different colonial traditions in the process of rapid change; trends, issues, and common themes in African politics. The ideology and politics of development, political system forms and processes, development efforts, and the challenges of state and nation-building.

PS 5190 - Contemporary Middle East Politics
3 credit hours Comparative study of political institutions, political processes, political dynamics and behavior in the Middle East and North Africa. Emphasizes historical, socio-cultural, and ideological forces that have shaped politics in the region, including Zionism, Islamism, Arab nationalism, colonialism, and the Palestinian Conflict.

PS 5200 - Problems in Government
3 credit hours Work done on a tutorial basis under the close direction of a professor. Student must present a proposal for departmental consideration and acceptance before enrolling in this course.

PS 5210 - International Relations
3 credit hours National power, balance of power, nationalism, imperialism, colonialism, war as an instrument of national policy, economic instruments of national policy, diplomacy, collective security, international law, and organization.

PS 5220 - World Politics
3 credit hours Experiencing contemporary international politics through the medium of simulation. Particular focus areas include the U.S., former Soviet Union, People's Republic of China, the Middle East, South Asia, and Southern Africa.

PS 5230 - Classical Political Theory
3 credit hours Western political theory from the ancient Greeks through the medieval Christians. Includes Sophocles, Aristophanes, Plato, Aristotle, stoicism, skepticism, Lucretius, Augustine, Thomas Aquinas, Thomas More.

PS 5240 - American Foreign Policy
3 credit hours Foreign policies in the nuclear age from Kennan and containment to the present with emphasis on contemporary problems and policies.

PS 5250 - Public Administration
3 credit hours Fundamentals of public management: organization theory, leadership, policy making, planning, budgeting, personnel, administrative law, bureaucratic behavior.

PS 5275 - NGOs and Non-Profits
3 credit hours Prerequisite: Instructor's permission required for non-International Affairs students. Key topics and issues surrounding the political environment and competing pressures that international non-governmental organizations and domestic non-profits confront. Formal readings paired with discussions from practitioners in the field and hands-on professional exercises.

PS 5300 - Comparative European Governments
3 credit hours Comparative analysis of the governmental forms and practices of England, France, Germany, the European Community, and others.

PS 5310 - Comparative Asian Government
3 credit hours Comparative analysis of the governmental forms and practices of China, Japan, India, and other governments of the region.

PS 5320 - Public Opinion
3 credit hours The nature of public opinion and its role in the political and social process; myths, symbols, other instruments; techniques of propaganda.

PS 5325 - Chinese Politics
3 credit hours Content structured into two sections: domestic and global. The first section examines the origin, development, and future prospects of China's economy and politics. The second section focuses on China's global impact by analyzing the nature, extent, and implications of China's power on the world stage. Students will assess China's global impact along four major dimensions-economic, political, security, and cultural.

PS 5330 - Political Parties
3 credit hours The nature of democracy, politics, and political parties; party organization and role in government; campaigning, primaries, conventions, general elections; the electoral college; voting behavior and pressure groups.

PS 5360 - Legislative Internship
3 to 12 credit hours A cooperative program with the state of Tennessee that provides for student service with the legislature on a full-time basis during the spring semester. Students selected on a competitive basis. Only six hours may count toward the degree for graduate programs.

PS 5370 - American Constitutional Law
3 credit hours The Supreme Court as a policy-making body in the governmental system. Emphasis on case studies in major areas of conflict including federalism, civil liberties, criminal procedure, and economic regulation.

PS 5380 - American Constitutional Law
3 credit hours The Supreme Court as a policy-making body in the governmental system. Emphasis on case studies in major areas of conflict including federalism, civil liberties, criminal procedure, and economic regulation.

PS 5400 - Municipal Government
3 credit hours The structure, powers, functions, and politics of municipal governments from the standpoint of city management. Attention is given to problems of municipal policy implementation.

PS 5440 - Governmental Budgeting and Finance Administration
3 credit hours Analysis of the legal and social nature of government budgets emphasizing the procedures and administrative methods of fiscal control. Study of budget documents at state and local levels. Offered only in alternate years.

PS 5500 - International Law
3 credit hours General principles of modern international law taught by the case study method in a seminar format encouraging debate and discussion. Issues concerning the development of international law and human rights.

PS 5510 - International Political Economy
3 credit hours Prerequisites: PS 1010 and 3210 or permission of instructor. The relationship between politics and economics in international affairs and its implications for global peace, security, the ecology, and social welfare.

PS 5590 - Administrative Law
3 credit hours Procedural aspects, substantive issues, judicial review of the type of law concerned with the powers and procedures of government agencies and the rights of citizens affected by them.

PS 5630 - Personnel Management
3 credit hours Prerequisite: PS 3250 or permission of instructor. The development and characteristics of public personnel administration in the United States with attention to recruitment, selection, position classification, compensation, performance evaluation, promotion, motivation, morale, discipline, separation, and public service unionism. Offered only in alternate years.

PS 5690 - International Relations of the Middle East
3 credit hours Prerequisite: PS 1010, PS 3210, PS 4190, or MES 2100. The contextual, substantive, and theoretical framework within which to understand Middle East international relations. Course themes include the Arab/Israeli Conflict, the major powers and the Middle East, Middle East Oil and international relations, Globalization and the Middle East, Islam

and Middle East international relations, regional cooperation, and terrorism.

PS 5700 - American Political Thought
3 credit hours Major thinkers and movements in American political thought from colonial times to the twentieth century with special emphasis on the thoughts of the framers of the American Constitution and their contemporaries.

PS 5770 - Russian Politics
3 credit hours Formation and evolution of the Russian state from pre-Communist to Soviet and post-Soviet stages. Special attention to historical origins and the role of authoritarianism in Russian political culture and to the ideological foundations, formation, and evolution and the reasons for decline of the Communist system. Includes a brief discussion of the other post-Soviet states.

PS 5900 - Latin American Politics
3 credit hours Comparative analysis of the institutions, functions, and aspects of culture of the Latin American nation-states and their relevance to understanding international relations, world politics, and diplomacy.

PS 5910 - International Organization
3 credit hours Development and prospects of the United Nations Organization and its major approaches to peace - pacific settlement, collective security, international law, arms control, trusteeship, preventive diplomacy, international conferences, functionalism. Offered only in alternate years.

PS 5920 - Modern Political Theory
3 credit hours Western political theory from the Renaissance to the present. Includes Machiavelli, Hobbes, Locke, Rousseau, J.S. Mill, Marx and Engels, Kierkegaard, Nietzsche, fascism, existentialism, Strauss, Arendt, and contemporary thought.

PS 6100 - Theory and Practice I: International Relations
2 credit hours Examines the theoretical foundations of international relations, the historical contexts in which they arose, the practical implications of the competing theoretical models, and the contemporary issues that occupy researchers and policymakers in the discipline.

PS 6110 - International Security in a Changing World
3 credit hours Surveys the research on the causes of international conflict, including interstate and intrastate conflict as well as other types of political violence between states and non-state actors. Includes discussions of the major wars in the modern international system, the military legacy of the Cold War, recent and continuing conflicts (intrastate and interstate), and the future of conflict in the international system.

PS 6120 - Peace and Conflict Resolution: Concepts, Processes, and Consequences
3 credit hours Surveys the theories of conflict resolution, the skills involved in negotiation, mediation, and crisis management, and the implications of crisis management. It includes discussions of theoretical premises of conflict resolution, negotiation, and mediation as well as the techniques of each and how they differ. It examines the ways in which society is reconstructed and the implication of reconstruction for the future of society.

PS 6150 - Special Topics in International Security and Peace Studies
3 credit hours Study in a specialized area within international security and peace studies. May be repeated for credit when subject matter varies.

PS 6170 - Literature Review in International Affairs
3 credit hours Prerequisites: PS 6100, PS 6200, PS 6400, PS 6500, PS 6110, and PS 6120 or PS 6210 and PS 6220. Focuses on the selection of a research topic and review of pertinent literature associated with a thesis.

PS 6200 - Theory and Practice II: Comparative Politics
2 credit hours Examines the theories and methods of comparative politics, the evolution of the discipline, and the issues that drive comparative political research today. Readings include both classic and contemporary literature from different theoretical, empirical, and methodological orientations.

PS 6210 - Global Political Economy and Globalization
3 credit hours Examines the major theoretical approaches to global political economy. Discusses the emergence of the global economy, globalization trends, and their impacts on and among countries and regions of the world. Examines the role of states,

international and domestic institutions, and other factors in creating and/or managing conflicts and facilitating of cooperation in the global political economy.

PS 6220 - Seminar in International Development
3 credit hours Examines the continuing problems and challenges of development across the world. It traces the roots of such problems, discusses the different approaches, concepts and theoretical methods of development, and assesses the impact of globalization on Third World politics, economics, and societies.

PS 6250 - Special Topics in International Development and Globalization
3 credit hours Study in a specialized area within international development. May be repeated for credit when subject matter varies.

PS 6290 - Practicum in International Affairs
1 to 6 credit hours A supervised experience with students placed in organizations active in globalization and development issues. The practicum placement must be approved by the graduate advisor and departmental graduate director prior to enrolling.

PS 6300 - Readings in International Relations
3 credit hours The theoretical basis of international politics. The biological, sociological, psychological, economic, and ideological aspects of international relations. May be repeated three times with different topics. May be repeated three times with different topic.

PS 6350 - International Affairs I: Concepts and Cases
3 credit hours Prerequisite: Permission of instructor for non-International Affairs students. Applies professional techniques and scholarly knowledge to historical and contemporary case studies of international and transnational problems. Emphasizes the use of concepts and evidence to understand and analyze complex issues and conflicts in international affairs, as well as skills needed to develop, justify, advocate, and present solutions and policy options.

PS 6400 - International Affairs II: Governance and Transnational Issues
3 credit hours Familiarizes students with the major actors, institutions, and legal networks in the fields of U.S. foreign policy and global governance as well as with the policy outcomes-discusses in a systematic manner what actors do, how they do it and how do they interact in the process. Special attention given to the effects these actors, institutions, and legal regimes have on the international system in such areas as maintaining order and promoting peace; regulating migration and economic development; and promoting social equality, human rights, and environmental security. Encourages students to relate the course material to the ongoing international processes and current events.

PS 6500 - Research Methods in International Affairs
3 credit hours Prerequisite: PS 3001. Develops the methods of research and data analysis commonly used in the study of international affairs. Emphasis upon proper design and execution of research strategies and upon practical application through use of software such as STATA or R. Required for completion of the M.A. in International Affairs.

PS 6550 - International Affairs III: Professional Skills and Methods
2 credit hours Prerequisites: PS 6250 and PS 6400 or approval by the MAIA graduate director. Foundational skills to work as professionals in international affairs. Focuses on the acquisition, evaluation, analysis, and presentation of information on problems and issues in international affairs. Emphasis is on open-source research, creating the types of documents that are in-demand in professional settings, and professional oral presentations.

PS 6600 - Global Justice
3 credit hours Prerequisite: Instructor's permission required for non-International Affairs students. Fosters critical thinking about pressing problems in the domain of global justice such as the justice of war; global poverty and inequality; theories of human rights; humanitarian intervention; environmental justice; cosmopolitan democracy and global governance; and the role of NGO's and advocacy groups.

PS 6640 - Thesis Research
1 to 3 credit hours Prerequisite: PS 6170. Drawing on work from PS 6170, collect and analyze data and compose thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion.

Sociology and Anthropology

Brandon Wallace, Chair
(615) 898-2508
www.mtsu.edu/soc/
The Sociology and Anthropology Department offers the Master of Arts in Sociology, a graduate certificate in Applied Social Research, and minors in Gerontology and Sociology at the graduate level.

Applied Social Research Certificate

Vicky M. MacLean
(615) 898-2692
vicky.maclean@mtsu.edu
The Applied Social Research certificate offers students the opportunity to acquire specialized knowledge and training in applied social research methods without necessarily pursuing a graduate degree. Students may pursue the certificate simultaneously while completing an advanced degree. Completion of the program will enable students to (1) obtain marketable job/career skills in applied social research with expertise in qualitative analysis and writing, quantitative methods, data analysis software packages, and program evaluation methods; and 2) apply ethically and socially informed judgment to social research by using sociological concepts to effectively inform academic audiences, policy makers, community planners, and organizational units.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies (askgrad@mtsu.edu).
Applicant must

1. meet the admission requirements of the University and the program.
2. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
3. submit official transcripts of all previous college work.

Admission Requirements

Admission to the Applied Social Research Graduate Certificate program requires

1. a B.A. or B.S. degree with beginning level skills in statistics/research methods;
2. an acceptable grade point average in all college work taken.

Certificate Requirements

Once admitted to the program, candidate must

1. complete 15 hours of graduate-level credit hours beyond the baccalaureate;
2. maintain an overall GPA of 3.0;
3. not earn more than three credit hours of C in the certificate program curriculum.

Required Courses (15 hours)

- SOC 6620 - Quantitative Research Methods **3 credit hours**
- SOC 6661 - Program Evaluation **3 credit hours**
- SOC 6675 - Social Statistics **3 credit hours**
- SOC 6720 - Qualitative Research Methods **3 credit hours**

One of the following:

- SOC 6010 - Social Policy Analysis **3 credit hours**
- SOC 6510 - Independent Study **3 credit hours**
- SOC 6900 - Practicum: Applied Analysis **3 credit hours**
- One elective from outside of Sociology **3 credit hours** ***(with department permission)***

Gerontology Minor

Sociology and Anthropology

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Sociology Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Sociology, M.A.

Vicky MacLean, Program Director
(615) 898-2692
Vicky.MacLean@mtsu.edu
The Department of Sociology and Anthropology offers the Master of Arts in Sociology and minors in Sociology and Gerontology at the graduate level.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Arts in Sociology program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average in all college work taken (generally at least a 2.75 GPA);
3. successful completion of at least 18 semester hours of undergraduate sociology courses, which includes the prerequisites of research methods (SOC 3040), statistics (SOC 3050), and sociological theory (SOC 3060) or their equivalents with a grade of C or better*;
4. completion of the Graduate Record Exam with acceptable scores.

NOTE: This requirement may be waived by the graduate program director for students with sufficiently high GPA and GRE scores.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Application deadline for the M.A. program is March 1 for Fall admission, September 15 for Spring admission, but applications are reviewed on a continuous, rolling basis by the Admissions Committee and Program Director.
Applicant must

1. submit application with appropriate fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Exam (GRE);
3. submit official transcripts of all previous college work;
4. submit letter of interest and goals;
5. submit an example of written work, preferably in the form of academic writing;
6. submit three letters of recommendation from mentors or colleagues able to speak to your ability to succeed in graduate school in the social/behavioral sciences.

Degree Requirements

The Master of Arts in Sociology requires completion of a minimum of 36 semester hours.
Candidate must

1. complete a minimum of 36 semester hours in graduate-level courses, all of which must be at the 6000 level and 24 of which must be Sociology courses;
2. complete all required courses with a minimum grade of B-;
3. complete 6 hours of thesis research (SOC 6640);
4. submit and successfully defend a thesis.

Curriculum: Sociology

The following illustrates the minimum coursework requirements.

Required Core (15 hours)

- SOC 6560 - Sociological Theory **3 credit hours**
- SOC 6620 - Quantitative Research Methods **3 credit hours**
- SOC 6675 - Social Statistics **3 credit hours**
- SOC 6720 - Qualitative Research Methods **3 credit hours**

- SOC 6661 - Program Evaluation **3 credit hours** OR
- SOC 6010 - Social Policy Analysis **3 credit hours**

Sociology Elective (3 hours)

Electives (12 hours)

- Chosen in consultation with thesis advisor and/or program director.

Thesis Research (6 hours)

- SOC 6640 - Thesis Research **1 to 6 credit hours (6 credit hours required)**

Anthropology

ANTH 5420 - Embodiment: Culture and Human Anatomy
3 credit hours (Same as SOC 5420.) An interdisciplinary approach to understanding the interplay of both biological and social forces on the human body.

ANTH 5910 - Special Projects
1 to 6 credit hours Experience in research through which special interests or needs of the student may be pursued under individual supervision. Arrangements should be made with an instructor prior to registration.

ANTH 5950 - Archaeological Field School
3 to 6 credit hours Basic techniques of archeology and paleoecology through participation in actual excavation and laboratory work.

Sociology

SOC 5011 - Social Inequality
3 credit hours The origins, variations, and consequences of class, status, and power in society. Includes individual and group economic interests, social prestige, ideology, market, and institutional inequality.

SOC 5020 - Sociology of Aging
3 credit hours Demographic, social, and cultural aspects of aging. Emphasis on the types of problems encountered by older persons in American society.

SOC 5030 - Topics in Gerontology
3 credit hours An opportunity to integrate gerontological theory and research techniques in working with the practical problems of older persons.

SOC 5040 - Health Care Delivery Issues
3 credit hours Sociological analysis of health care delivery and major issues facing providers, patients, and citizens in the twenty-first century, from the level of social interaction through the broader structures of health care systems and policies. Includes sociological approaches to health and medicine, health care institutions, insurance and reimbursement structures, and vulnerable populations, along with future issues and directions in U.S. health care delivery.

SOC 5050 - Sociology of Families
3 credit hours An analysis: contemporary American family patterns; racial, ethnic, and class variations.

SOC 5100 - Sociology of Work
3 credit hours Comparative analysis of work structure and processes in organizational contexts, including study of management and employee organizations and legal environments regulating workplace relations.

SOC 5140 - Violence in the Family
3 credit hours (Same as CDFS 5140.) Causes, dynamics, and consequences of violence in the family. Includes the discussion of violence toward children, spouses, dating partners, siblings, and elders. Emphasizes the social conditions which lead to these types of violence.

SOC 5150 - Topics in Sociology
3 credit hours An in-depth topic significant in current sociological literature.

SOC 5160 - Sociology of Gangs
3 credit hours History of gangs in the U.S., the factors which account for their formation and perpetuation, and current empirical data on gang composition, demographics, and culture. Policy strategies for prevention, law enforcement, and nonlegal interventions assessed.

SOC 5240 - Race and Ethnic Relations
3 credit hours Theories and dynamics of intergroup relations in a multiethnic society.

SOC 5300 - Criminology
3 credit hours Theories of the causes of criminal behavior and coverage of its development and incidence; punishment and methods of control and rehabilitation.

SOC 5360 - Medical Sociology
3 credit hours Sociological analysis of health, biomedicine, epidemiology, and disease, along with critical analysis of major issues facing providers, patients, and citizens in the twenty-first century. Focuses on social epidemiology, social determinants and patterning of disease, health care delivery, institutions, and policy in the U.S. and other nations, and major theoretical developments in the sociology of health, illness, and healing.

SOC 5361 - Contemporary Issues in Women's Health
3 credit hours Examines the social and cultural issues that shape women's health-related experiences and disparities in health and illness in contemporary culture. Critically analyzes problems associated with medicalization, technological favoritism, and for-profit intrusion. Explores issues and experiences among women by race/ethnicity, socioeconomic class, age, sexual orientation, and abilities. May be taken for Women's and Gender Studies graduate certificate credit.

SOC 5420 - Embodiment: Culture and Human Anatomy
3 credit hours (Same as ANSC 5420.) An interdisciplinary approach to understanding the interplay of both biological and social forces on the human body.

SOC 5450 - Sociology of Emotions
3 credit hours Prerequisite: Graduate standing and at least three hours of upper-division sociology courses. Sociological examination of the construction and management of emotions in the context of community and society.

SOC 5500 - Social Psychology
3 credit hours Individual behavior in social contexts and symbolic interaction among groups. Includes social influences on perception, conformity, attitudes, communication, group structure, leadership, and role behavior.

SOC 5511 - Social Movements and Social Change
3 credit hours Sociological theories of revolutions, rebellions, civil wars, and protest movements of the past and present and the relationship to significant social changes.

SOC 5520 - Population and Society
3 credit hours Examines world and U.S. population trends and the impact of social forces on such demographic variables as births, deaths, migration, age, sex, education, marital status, and how these impact social conditions.

SOC 5540 - Juvenile Delinquency
3 credit hours Social factors related to delinquency including family, peer group, school, and community. Includes the juvenile justice system and its agents.

SOC 5550 - Sociology of Religion
3 credit hours Religion as social process and institution. An ideological, structural, and functional analysis. Specific U.S. religions examined in detail.

SOC 5560 - Organizational Structures and Processes
3 credit hours Analysis of structure and processes of change, organizational environments, modes of power, ideologies, forms of control and resistance, including alternatives to bureaucracy.

SOC 5650 - Sociology of Law
3 credit hours Prerequisite: SOC 1010 or SOC 2010. Sociological examination of the relationship between law and society with a focus on how sociologists study law, legal systems, and legal actors.

SOC 5660 - Urban and Community Studies
3 credit hours Focuses on concept of community as a core idea in the historical development of sociology, concentrating on theories and historical trends of urbanization and current urban problems and policies.

SOC 5790 - Sport and Society
3 credit hours Behavioral approach to the sport and leisure phenomena from the related perspectives of sociology and anthropology.

SOC 5800 - Special Projects
1 to 3 credit hours Field experiences or reading courses through which special interests or needs of the student may be pursued under individual supervision. No more than three hours may be used in the major. Arrangements must be made with instructor prior to registration.

SOC 6010 - Social Policy Analysis
3 credit hours A historical comparative examination of social policy formulation, structure, and consequences. Focus on policy formation in modern and developing nations. Critical analysis of social policy development.

SOC 6200 - Globalization and the Professions
3 credit hours (Same as PRST 6200.) Introduces students to the fundamental concepts and key issues surrounding globalization and the professions. Examines the various descriptive and explanatory accounts of globalization with a focus on both the positive and negative components of globalization. Reviews brief history of paid work in the U.S. with a

particular eye on the ways that professions have been shaped by globalization processes.

SOC 6510 - Independent Study
3 credit hours Recommended for students past the midpoint in their master's programs. Designed to provide an opportunity to fill perceived gaps in the program of study and as precursor for the thesis. Arrangements must be made with instructor prior to registration.

SOC 6540 - Topics in Crime and Deviance
3 credit hours Critical analysis of selected topics in the fields of crime and deviance. Students pursue individual projects that require integration of their theoretical understanding with contemporary applications.

SOC 6545 - Topics in Gender
3 credit hours Critical analysis of selected topics in the study of gender in sociology with a focus on such issues as race/ethnicity, social class, work, deviance, and sexuality. Examines the major contemporary scholarly debates about gender and explores how gender is embedded in different institutions and organizations. A maximum of six hours may be credited to one's major.

SOC 6550 - Seminar on Aging
3 credit hours In-depth investigation of selected topics in social gerontology.

SOC 6560 - Sociological Theory
3 credit hours Encourages students to think sociologically, integrating theoretical knowledge with a critical examination of everyday experiences and social problems/issues. Addresses both classical and contemporary theories: structural, interpretive, micro and macro applications.

SOC 6570 - Seminar in Advanced Social Psychology
3 credit hours The dynamics of human interaction: attitudes, processes, group structures, settings, and properties.

SOC 6620 - Quantitative Research Methods
3 credit hours Focuses on the design and application of quantitative data collection and analysis procedures to practical problems and issues. Students pursue supervised independent design and analysis using SPSS or SAS.

SOC 6630 - Seminar in the Family
3 credit hours Principles of family organization; family as a sociocultural institution in various societies; theories of family structure, change, and deviance.

SOC 6640 - Thesis Research
1 to 6 credit hours Prerequisite: Student must have filed Candidacy Form and selected thesis committee before enrolling. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

SOC 6650 - Contemporary Social Issues
3 credit hours An in-depth investigation of a particular sociological issue or subdiscipline. A maximum of six hours may be credited to one's major.

SOC 6661 - Program Evaluation
3 credit hours (Same as PSY 6661.) Prerequisite: SOC 3040 or permission of instructor. Methods and issues of client-centered social program evaluation. Topics include evaluation methods, proposal construction, report writing, and presentation techniques.

SOC 6670 - Mental Health and Aging
3 credit hours The basic concepts associated with mental health and the aging process. The epidemiology, assessment process, and approaches to treatment stressed. A positive approach to the mental well-being of the older adult provided.

SOC 6675 - Social Statistics
3 credit hours (Same as PRST 6600) An intermediate level treatment of statistical concepts and methods for the analysis of sociological data with emphasis on the application of multivariate statistical methods for basic and applied sociological research. Statistical analysis software (e.g., SPSS, SAS) applied to existing datasets.

SOC 6690 - Death and Survivorship
3 credit hours The social complexities of dying, death, and survivorship with particular emphasis given to the aging population.

SOC 6720 - Qualitative Research Methods
3 credit hours Focuses on the design and application of qualitative data collection and analysis procedures

to practical problems and issues. Students pursue supervised independent and group projects.

SOC 6900 - Practicum: Applied Analysis
3 credit hours Prerequisite: Permission of instructor. Supervised independent study in which student is placed in an organization on a contractual basis. Course directed toward student pursuing career in applied sociology.

World Languages, Literatures, and Cultures

Roger Pieroni, Chair
(615) 898-2981
www.mtsu.edu/worldlang/
The Department of World Languages, Literatures, and Cultures offers the Master of Arts in Teaching with concentrations in French, German, or Spanish. A minor in Foreign Languages is also offered.

Foreign Languages Minor

World Languages, Literatures, and Cultures

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Foreign Languages, French Concentration, M.A.T.

Jun Da, Program Director
(615) 898-2279
Jun.Da@mtsu.edu
World Languages, Literatures, and Cultures offers the Master of Arts in Teaching with concentrations in French, German, or Spanish. Also offered is a minor at the graduate level. Students who would like to minor in world languages should determine the requirements based on their major curriculum in consultation with their advisors. This degree is intended to prepare native and non-native speakers of the world language for a career in world language teaching at the elementary or secondary level. Students planning to teach in elementary school must be licensed prior to admission to the M.A.T. program. Those planning to teach on the secondary level may be already licensed or may pursue licensure while enrolled in the M.A.T. program; however, requirements for admission to teacher education must be met. Students select a concentration from French, German, or Spanish.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

To be admitted to the Master of Arts in Teaching in Foreign Languages program with a French concentration, applicant must have earned at least 24 semester hours of French. Students may complete up to 6 hours of these as undergraduate hours while concurrently enrolled in the graduate program. Native speakers must consult with the graduate director regarding this requirement.
The Graduate Record Examination (GRE) is required. A combined score of 291 on the verbal and quantitative portions of the Graduate Record Examination is considered indicative of potential for an acceptable level of academic performance.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE);
3. submit two letters of reference;
4. submit official transcripts of all previous college work.

Degree Requirements

The Master of Arts in Teaching in Foreign Languages with a concentration in French requires completion of 36 semester hours (non-thesis) or 39-48 semester hours (thesis).
Candidate must

1. complete 36 semester hours (non-thesis option) or 39-48 semester hours (thesis option) including 24 hours in world language courses as listed below; no more than 30 percent of the total degree hours dual-listed as undergraduate/graduate hours can be counted toward the degree;
2. complete a professional education component approved by the chair of the Educational Leadership Department;
3. achieve an oral proficiency level in the target language (French) of at least "Advanced" and a written proficiency level of "Advanced High" on the ACTFL scale; students should consult the world languages graduate director for additional information on this requirement;
4. demonstrate a basic reading knowledge in a language other than French; this requirement may be met by passing a world language reading examination or by earning a final grade of A or B (83%) in FREN 5990, GERM 5990, LATN 5990, or SPAN 5920;

5. successfully complete a written comprehensive examination that covers language teaching methods and the language, literature, and culture of the French language (may be taken no more than twice).

Curriculum: Foreign Languages, French

The following illustrates the coursework requirements.

Thesis Option (39-48 hours)

Required Courses (9 hours)

- FL 5500 - Introduction to Teaching Foreign Language **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours (3 credit hours required)**
- FREN 6000 - Seminar in French Studies **3 credit hours**

Educational Leadership Courses (9 hours)

- To be selected in consultation with advisor.

Electives (9 hours)

- Electives must be at 5000 or 6000 level in the concentration or in consultation with advisor.

Foreign Language Teaching (6 hours)

Choose 6 hours from the following:

- FL 6010 - Foreign Language Acquisition: Theory and Practice **3 credit hours**
- FL 6300 - Teaching Foreign Languages for Proficiency **3 credit hours**
- FL 6700 - Introduction to Linguistics **3 credit hours**
- FL 6800 - Instructional Technology in Foreign Language Education **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours**

Third Language Proficiency or Elective (3 hours)

- FREN 5990, GERM 5990, LATN 5990, or SPAN 5920 or an elective chosen in consultation with advisor **3 credit hours**

Thesis (3-12 hours)

- FL 6640 - Thesis Research **1 to 6 credit hours (3 credit hours required)**

Non-thesis Option (36 hours)

Required Courses (9 hours)

- FL 5500 - Introduction to Teaching Foreign Language **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours (3 credit hours required)**
- FREN 6000 - Seminar in French Studies **3 credit hours**

Educational Leadership Courses (9 hours)

- To be selected in consultation with advisor.

Electives (9 hours)

- Electives must be at 5000 or 6000 level in the concentration, or in consultation with advisor.

Foreign Language Teaching (6 hours)

Choose 6 hours from the following:

- FL 6010 - Foreign Language Acquisition: Theory and Practice **3 credit hours**
- FL 6300 - Teaching Foreign Languages for Proficiency **3 credit hours**
- FL 6700 - Introduction to Linguistics **3 credit hours**
- FL 6800 - Instructional Technology in Foreign Language Education **3 credit hours**
- FL 6900 - Issues in Foreign Language Acquisition **1 to 3 credit hours**

Third Language Proficiency or Elective (3 hours)

- FREN 5990, GERM 5990, LATN 5990, or SPAN 5920 or an elective chosen in consultation with advisor **3 credit hours**

Program Notes

Candidates for the M.A.T. with a major in Foreign Languages and a concentration in either French, German, or Spanish may choose whether or not to seek licensure to teach. The curriculum selected is based on the individual's preference and need:

1. for those already licensed to teach in the state of Tennessee;
2. for those who seek licensure in conjunction with the M.A.T. degree;
3. for those who wish to pursue the degree without teacher licensure in Tennessee.

The foreign language requirement under each option is the same; candidates should consult an advisor in the Educational Leadership Department regarding the courses pertinent to their degree and career goals.

Foreign Languages, German Concentration, M.A.T.

Jun Da, Program Director
(615) 898-2279
Jun.Da@mtsu.edu
World Languages, Literatures, and Cultures offers the Master of Arts in Teaching with concentrations in French, German, or Spanish. Also offered is a minor at the graduate level. Students who would like to minor in world languages should determine the requirements based on their major curriculum in consultation with their advisors. This degree is intended to prepare native and non-native speakers of the world language for a career in world language teaching at the elementary or secondary level. Students planning to teach in elementary school must be licensed prior to admission to the M.A.T. program. Those planning to teach on the secondary level may be already licensed or may pursue licensure while enrolled in the M.A.T. program; however, requirements for admission to teacher education must be met. Students select a concentration from French, German, or Spanish.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

To be admitted to the Master of Arts in Teaching in Foreign Languages program with a German concentration, applicant must have earned at least 24 semester hours of German. Students may complete up to 6 hours of these as undergraduate hours while concurrently enrolled in the graduate program. Native speakers must consult with the graduate director regarding this requirement.
The Graduate Record Examination (GRE) is required. A combined score of 291 on the verbal and quantitative portions of the Graduate Record Examination is considered indicative of potential for an acceptable level of academic performance.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE);
3. submit two letters of reference;
4. submit official transcripts of all previous college work.

Degree Requirements

The Master of Arts in Teaching in Foreign Languages with a concentration in German requires completion of 36 semester hours (non-thesis option) or 39-48 (thesis option).
Candidate must

1. complete 36 semester hours (non-thesis) or 39-48 semester hours (thesis) including 24 hours in foreign language courses as listed below; no more than 30 percent of the total degree hours dual-listed as undergraduate/graduate hours can be counted toward the degree;
2. complete a professional education component approved by the chair of the Educational Leadership Department;
3. achieve an oral proficiency level in the target language (German) of at least "Advanced" and a written proficiency level of "Advanced High" on the ACTFL scale; students should consult the world languages graduate director for additional information on this requirement;
4. demonstrate a basic reading knowledge in a language other than German; this requirement may be met by passing a world language reading examination or by earning a final grade of A or B (83%) in FREN 5990, GERM 5990, LATN 5990, or SPAN 5920;

5. successfully complete a written comprehensive examination that covers language teaching methods and the language, literature, and culture of the German language (may be taken no more than twice).

Curriculum: Foreign Languages, German

The following illustrates the coursework requirements.

Thesis Option (39-48 hours)

Required Courses (9 hours)

- FL 5500 - Introduction to Teaching Foreign Language **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours (3 credit hours required)**
- GERM 6000 - Seminar in German Studies **3 credit hours**

Educational Leadership Courses (9 hours)

- To be selected in consultation with advisor.

Electives (9 hours)

Electives must be at 5000 or 6000 level in the concentration, or in consultation with the advisor.

Foreign Language Teaching (6 hours)

Choose 6 hours from the following:

- FL 6010 - Foreign Language Acquisition: Theory and Practice **3 credit hours**
- FL 6300 - Teaching Foreign Languages for Proficiency **3 credit hours**
- FL 6700 - Introduction to Linguistics **3 credit hours**
- FL 6800 - Instructional Technology in Foreign Language Education **3 credit hours**
- FL 6900 - Issues in Foreign Language Acquisition **1 to 3 credit hours**

Third Language Proficiency or Elective (3 hours)

- FREN 5990, GERM 5990, LATN 5990, or SPAN 5920 or an elective in consultation with advisor **3 credit hours**

Thesis (3-12 hours)

- FL 6640 - Thesis Research **1 to 6 credit hours (3 credit hours required)**

Non-thesis Option (36 hours)

Required Courses (9 hours)

- FL 5500 - Introduction to Teaching Foreign Language **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours (3 credit hours required)**
- FREN 6000 - Seminar in French Studies **3 credit hours**

Educational Leadership Courses (9 hours)

- To be selected in consultation with advisor.

Electives (9 hours)

- Electives must be at 5000 or 6000 level in the concentration, or in consultation with the advisor.

Foreign Language Teaching (6 hours)

Choose 6 hours from the following:

- FL 6010 - Foreign Language Acquisition: Theory and Practice **3 credit hours**
- FL 6300 - Teaching Foreign Languages for Proficiency **3 credit hours**
- FL 6700 - Introduction to Linguistics **3 credit hours**
- FL 6800 - Instructional Technology in Foreign Language Education **3 credit hours**
- FL 6900 - Issues in Foreign Language Acquisition **1 to 3 credit hours**

Third Language Proficiency or Elective (3 hours)

- FREN 5990, GERM 5990, LATN 5990, or SPAN 5920 or an elective in consultation with advisor **3 credit hours**

Program Notes

Candidates for the M.A.T. with a major in Foreign Languages and a concentration in either French, German, or Spanish may choose whether or not to seek licensure to teach. The curriculum selected is based on the individual's preference and need:

1. for those already licensed to teach in the state of Tennessee;
2. for those who seek licensure in conjunction with the M.A.T. degree;
3. for those who wish to pursue the degree without teacher licensure in Tennessee.

The world language requirement under each option is the same; candidates should consult an advisor in the Educational Leadership Department regarding the courses pertinent to their degree and career goals.

Foreign Languages, Spanish Concentration, M.A.T.

Jun Da, Program Director
(615) 898-2279
Jun.Da@mtsu.edu
World Languages, Literatures, and Cultures offers the Master of Arts in Teaching with concentrations in French, German, or Spanish. Also offered is a minor at the graduate level. Students who would like to minor in world languages should determine the requirements based on their major curriculum in consultation with their advisors. This degree is intended to prepare native and non-native speakers of the world language for a career in world language teaching at the elementary or secondary level. Students planning to teach in elementary school must be licensed prior to admission to the M.A.T. program. Those planning to teach on the secondary level may be already licensed or may pursue licensure while enrolled in the M.A.T. program; however, requirements for admission to teacher education must be met. Students select a concentration from French, German, or Spanish.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

To be admitted to the Master of Arts in Teaching in Foreign Languages program with a Spanish concentration, applicant must have earned at least 24 semester hours of Spanish. Students may complete up to 6 hours of these as undergraduate hours while concurrently enrolled in the graduate program. Native speakers must consult with the graduate director regarding this requirement.
The Graduate Record Examination (GRE) is required. A combined score of 291 on the verbal and quantitative portions of the Graduate Record Examination is considered indicative of potential for an acceptable level of academic performance.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the Graduate Record Examination (GRE);
3. submit two letters of reference;
4. submit official transcripts of all previous college work.

Degree Requirements

The Master of Arts in Teaching in Foreign Languages with a concentration in Spanish requires completion of 36 semester hours (non-thesis) or 39-48 (thesis) hours.
Candidate must

1. complete 36 semester hours (non-thesis) or 39-48 semester hours (thesis) including 24 hours in world language courses as listed below; no more than 30 percent of the total degree hours dual-listed as undergraduate/graduate hours can be counted toward the degree;
2. complete a professional education component approved by the chair of the Educational Leadership Department;
3. achieve an oral proficiency level in the target language (Spanish) of at least "Advanced" and a written proficiency level of "Advanced High" on the ACTFL scale; students should consult the world languages graduate director for additional information on this requirement;
4. demonstrate a basic reading knowledge in a language other than Spanish; this requirement may be met by passing a world language reading examination or by earning a final grade of A or B (83%) in FREN 5990, GERM 5990, LATN 5990, or SPAN 5920;

5. successfully complete a written comprehensive examination that covers language teaching methods and the language, literature, and culture of the Spanish language (may be taken no more than twice).

Curriculum: Foreign Languages, Spanish

The following illustrates the coursework requirements.

Thesis Option (39-48 hours)

Required Courses (9 hours)

- FL 5500 - Introduction to Teaching Foreign Language **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours (3 credit hours required)**
- SPAN 6000 - Seminar in Spanish Studies **3 credit hours**

Educational Leadership Courses (9 hours)

- To be selected in consultation with advisor.

Electives (9 hours)

- Electives must be at 5000 or 6000 level in the concentration, or in consultation with advisor.

Foreign Language Teaching (6 hours)

Choose 6 hours from the following:

- FL 6010 - Foreign Language Acquisition: Theory and Practice **3 credit hours**
- FL 6300 - Teaching Foreign Languages for Proficiency **3 credit hours**
- FL 6700 - Introduction to Linguistics **3 credit hours**
- FL 6800 - Instructional Technology in Foreign Language Education **3 credit hours**
- FL 6900 - Issues in Foreign Language Acquisition **1 to 3 credit hours**

Third Language Proficiency or Elective (3 hours)

- FREN 5990, GERM 5990, LATN 5990, or SPAN 5920 or an elective chosen in consultation with advisor **3 credit hours**

Thesis (3-12 hours)

- FL 6640 - Thesis Research **1 to 6 credit hours (3 credit hours required)**

Non-thesis Option (36 hours)

Required Courses (9 hours)

- FL 5500 - Introduction to Teaching Foreign Language **3 credit hours**
- FL 6990 - Internship **3 to 6 credit hours**
- SPAN 6000 - Seminar in Spanish Studies **3 credit hours**

Educational Leadership Courses (9 hours)

- To be selected in consultation with advisor

Electives (9 hours)

- Electives must be at 5000 or 6000 level in the concentration or in consultation with advisor.

Foreign Language Teaching (6 hours)

Choose 6 hours from the following:

- FL 6010 - Foreign Language Acquisition: Theory and Practice **3 credit hours**
- FL 6300 - Teaching Foreign Languages for Proficiency **3 credit hours**
- FL 6700 - Introduction to Linguistics **3 credit hours**
- FL 6800 - Instructional Technology in Foreign Language Education **3 credit hours**
- FL 6900 - Issues in Foreign Language Acquisition **1 to 3 credit hours**

Third Language Proficiency or Elective (3 hours)

- FREN 5990, GERM 5990, LATN 5990, or SPAN 5920 or an elective chosen in consultation with advisor **3 credit hours**

Program Notes

Candidates for the M.A.T. with a major in Foreign Languages and a concentration in either French, German, or Spanish may choose whether or not to seek licensure to teach. The curriculum selected is based on the individual's preference and need:

1. for those already licensed to teach in the state of Tennessee;
2. for those who seek licensure in conjunction with the M.A.T. degree;
3. for those who wish to pursue the degree without teacher licensure in Tennessee.

The world language requirement under each option is the same; candidates should consult an advisor in the Educational Leadership Department regarding the courses pertinent to their degree and career goals.
Candidate must

1. file a degree plan in the College of Graduate Studies prior to entry into the program;
2. file a Notice of Intent to Graduate form in the College of Graduate Studies within the first two weeks of the term in which the student intends to graduate.

Foreign Languages

FL 5500 - Introduction to Teaching Foreign Language
3 credit hours Prerequisite: Permission of graduate coordinator. Introduces students to a variety of approaches and methods for foreign language instruction in elementary or secondary schools.

FL 6010 - Foreign Language Acquisition: Theory and Practice
3 credit hours Prerequisite: Permission of graduate coordinator. Acquaints students with major theories of foreign language acquisition and various approaches to language learning.

FL 6020 - Reading, Writing, and Learning Methods for ESL
3 credit hours (Same as YOED 6020.) Prerequisite: Permission of graduate coordinator. Provides teaching ideas for promoting oral, reading, and writing development in English for K-12 English learners. Language acquisition theory, classroom organization, teaching strategies, and assessment procedures for effective English learner instruction.

FL 6300 - Teaching Foreign Languages for Proficiency
3 credit hours Prerequisite: Permission of graduate coordinator. Focuses on the study of foreign language methodology designed to develop proficiency in the target language.

FL 6640 - Thesis Research
1 to 6 credit hours Prerequisite: Permission of graduate coordinator. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled for thesis research, students should register for at least one credit hour of research each semester until the thesis is completed. S/U grading.

FL 6700 - Introduction to Linguistics
3 credit hours Prerequisite: Permission of graduate coordinator. Basic concepts of linguistic analysis, which are applied to linguistic phenomena in French, German, Spanish, and English.

FL 6800 - Instructional Technology in Foreign Language Education
3 credit hours Prerequisite: Permission of graduate coordinator. An introductory course with an emphasis on telecommunication and computer applications. Critical examination and evaluation of existing technologies and programs.

FL 6900 - Issues in Foreign Language Acquisition
1 to 3 credit hours Prerequisite: Approval of graduate coordinator. Independent study to address a problem or investigate an issue agreed upon by both student and instructor. May be repeated for a maximum of 9 credits.

FL 6990 - Internship
3 to 6 credit hours Prerequisite: Permission of graduate coordinator. Three credits are given for a supervised teaching internship at MTSU; six credits are given for a teaching internship abroad. Under certain circumstances a self-designed, nonteaching internship may be undertaken locally or in a foreign country where the target language is spoken. Students should consult the graduate director in Foreign Languages and Literatures for details.

FL 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

French

FREN 5010 - Topics in Twentieth-Century French Literature
3 to 6 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

FREN 5020 - Topics in French Film
3 credit hours

FREN 5030 - Topics in Nineteenth-Century French Literature
3 to 6 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

FREN 5040 - Topics in Eighteenth-Century French Literature and Culture

3 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor.

FREN 5050 - Topics in Medieval and Renaissance French Literature
3 to 6 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

FREN 5060 - Topics in Neoclassical French Literature
3 to 6 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

FREN 5080 - Topics in Medieval French Literature
3 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of instructor.

FREN 5110 - French Press and Politics
3 credit hours Prerequisites: FREN 3010 and FREN 3040 or permission of instructor. Focuses on contemporary France and current events, emphasizing the role of media as well as relevant political and social issues. Stresses cultural knowledge and competency in oral and written expression.

FREN 5120 - La Cuisine francaise: le gout et la gourmandise
3 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of instructor. Course focuses on the culinary history of France and its role in the social, economic, and political identity of France.

FREN 5130 - Special Topics in Professional French
3 credit hours Prerequisite: Permission of instructor. Focuses on refining linguistic and cultural proficiency and on pedagogical fundamentals of developing proficiency-based curricula.

FREN 5150 - Money, Murder, and Madness
3 credit hours Prerequisite: Permission of instructor. Examines social and cultural issues addressed in French-language literature, film, and other media, and focuses specifically on the confrontation of immorality and criminal behavior.

FREN 5160 - Social Change in the Francophone World
3 credit hours Prerequisite: Permission of instructor. Focuses on major social movements of France and the French-speaking world, addressing diverse topics such as race, gender, class, sexuality, politics, and religion.

FREN 5170 - The French Graphic Novel
3 credit hours Prerequisite: Permission of instructor. Focuses on the tradition of the French graphic novel. Taught in French.

FREN 5180 - Comparative Stylistics of French and English
3 credit hours Prerequisite: Permission of instructor. Focuses on contrastive and stylistic analysis of French texts, with emphasis on grammatically accurate translation.

FREN 5900 - Directed Study in French Literature and Culture
1 to 6 credit hours Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in French literature or culture. Arrangements must be made with instructor prior to registration.

FREN 5990 - French for Reading Knowledge
3 credit hours Prerequisites: Admission to the College of Graduate Studies or permission of the instructor. For graduate students seeking proficiency in reading French for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor in French.

FREN 6000 - Seminar in French Studies
3 credit hours Prerequisite: Permission of instructor. Comprehensive study of history and structure of French language; advanced stylistics leading to research project of cultural, literary, or linguistic topic.

FREN 6100 - Professional Development Abroad
1-12 credit hours Prerequisite: Permission of instructor. Student pursues an international educational or internship opportunity intended to support professional goals. Projects must be pre-approved.

FREN 6970 - Seminar in French Literature
3 credit hours Prerequisites: 9 hours of French on the 4000/5000 level; must be of graduate status in the M.A. program or have permission of professor. An in-depth look at specific topics, themes, and/or authors in French literature from the medieval period to the present. May be taken twice.

FREN 6980 - Seminar in French and Francophone Cultures
3 credit hours Explores cultural themes and issues of the francophone world. May be taken twice with change of topic.

German

GERM 5010 - Topics in German Literature and Culture
3 credit hours Prerequisite: 6 hours of German beyond intermediate level or permission of instructor. Topics will vary. Course may be repeated with different topic.

GERM 5020 - German Literature: 1725-1880
3 credit hours Prerequisite: 6 hours of German beyond intermediate level or permission of instructor.

GERM 5030 - German Literature: 1880 to Present
3 credit hours Prerequisite: 6 hours of German beyond intermediate level or permission of instructor.

GERM 5900 - Directed Study in German Literature and Culture
1 to 6 credit hours Prerequisite: 15 hours of German or permission of instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in German literature or culture. Arrangements must be made with instructor prior to registration.

GERM 5990 - German for Reading Knowledge
3 credit hours Prerequisites: Admission to the College of Graduate Studies or permission of the instructor. For graduate students seeking proficiency in reading German for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor in German.

GERM 6000 - Seminar in German Studies
3 credit hours Prerequisite: Permission of instructor. Comprehensive study of history and structure of German language; advanced stylistics leading to research project of cultural, literary, or linguistic topic.

GERM 6970 - Seminar in German Literature
3 credit hours Prerequisites: 9 hours of German at the 4000 level or higher or permission of instructor; graduate status in the M.A. or M.A.T. program. An in-depth study of an author, genre, period, or literary movement in German literature from 1850 to present. May be taken twice.

Humanities

HUM 5550 - The Grail Legend in Film and Literature
3 credit hours Prerequisites: ENGL 2030 and either HUM 2610 or ENGL 2020 or permission of instructor. Explores the origin and development of the Grail legend in Western art primarily in literature and film.

Latin

LATN 5990 - Latin for Reading Knowledge
3 credit hours Prerequisite: Admission to the College of Graduate Studies or permission of the instructor. For graduate students seeking proficiency in reading Latin for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor.

Spanish

SPAN 5010 - History of the Spanish Language
3 credit hours Historical development of Spanish from Latin. Students also become familiar with the characteristics of Old Spanish.

SPAN 5015 - Advanced Spanish Grammar
3 credit hours Prerequisite: SPAN 3080 and one other 3000-level course or permission of instructor. An in-depth study of problematic grammar structures.

SPAN 5020 - Spanish Literature I
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Spanish literature from its beginnings to 1700, emphasis on literary history, styles, and themes. Prose fiction and nonfiction, poetry, and drama included.

SPAN 5030 - Spanish Literature II
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Works from different genres which represent major literary movements from the eighteenth century to the present.

SPAN 5040 - Latin American Literature I
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Latin American literature from pre-Columbian times through Romanticism. Prose fiction and nonfiction, poetry, and drama included.

SPAN 5045 - Topics in Hispanic Cinema
3 credit hours Prerequisite: SPAN 3020 or permission of instructor. A cultural study of the peoples and societies of Latin America and Spain through film

SPAN 5050 - Latin American Literature II
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Major works of Latin American literature from the late nineteenth century to the present.

SPAN 5060 - Special Topics in Hispanic Studies
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Topics in language, culture, or literature.

SPAN 5065 - Studies in Hispanic Popular Culture
3 credit hours Prerequisite: SPAN 3020 or permission of instructor. Context of socioeconomic, political, and cultural customs and practices in Spain and Latin America. Focus is on fiction, film, television, newspapers and magazines, popular music, and consumption in everyday life.

SPAN 5070 - Special Topics in Spanish Literature or Culture
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Topics in peninsular Spanish literature or culture.

SPAN 5090 - Special Topics in Latin American Literature or Culture
3 credit hours Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Topics in specialized areas of Latin American literature or culture vary.

SPAN 5120 - Spanish Phonetics and Pronunciation
3 credit hours A practical introduction to phonetic principles involved in achieving native-sounding Spanish pronunciation, including sounds, stress, intonation, and smooth speech stylistics. Native Spanish speakers or students with native-like Spanish pronunciation may not take this course for credit without instructor permission.

SPAN 5900 - Directed Readings in Spanish Literature and Culture
1 to 6 credit hours Prerequisite: 15 hours of Spanish or permission of instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in Spanish or Latin American literature or culture. Arrangements must be made with instructor prior to registration.

SPAN 5910 - Directed Readings in Latin American Literature and Culture
1 to 6 credit hours Prerequisite: 15 hours of Spanish or permission of instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in Spanish or Latin American literature or culture. Arrangements must be made with instructor prior to registration.

SPAN 5920 - Spanish for Reading Knowledge
3 credit hours Prerequisite: Admission to College of Graduate Studies or permission of instructor. For graduate students seeking proficiency in reading Spanish for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor in Spanish or the undergraduate foreign language requirement.

SPAN 5990 - Study Abroad
3 to 12 credit hours Prerequisites: Enrollment in the Master of Arts in Teaching program or approval of the instructor. Students will spend at least four weeks in a Spanish-speaking country studying the Spanish language, literature, and culture. Credits may be earned in Murcia, Spain, or other study abroad programs approved by the Department of World, Languages, Literatures, and Cultures. Course may be used for elective credit for the Master of Arts in Teaching degree.

SPAN 6000 - Seminar in Spanish Studies
3 credit hours Prerequisite: Permission of instructor. Comprehensive study of history and structure of

Spanish language; advanced stylistics leading to research project of cultural, literary, or linguistic topic.

SPAN 6970 - Seminar in Hispanic Literature
3 credit hours Prerequisite: 9 hours of Spanish at the 4000-5000 level or higher or permission of the instructor. An in-depth study of an author, genre, period, or literary movement in Peninsular or Latin American literature. May be taken twice.

College of Media and Entertainment

Journalism and Strategic Media

Greg Pitts, Director
(615) 494-8925
Greg.Pitts@mtsu.edu
The School of Journalism and Strategic Media offers the Master of Science (M.S.) in Media and Communication and a minor in Mass Communication.

Mass Communication Minor

There are two patterns of minors from which a candidate may choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects. The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

Media and Communication, M.S.

Jason Reineke, Program Director
(615) 494-7746
Jason.Reineke@mtsu.edu
The School of Journalism and Strategic Media offers the Master of Science degree in Media and Communication. A graduate minor in Mass Communication is also offered.
The degree is designed for students seeking an advanced degree in mass media theory and methods of research. The degree is appropriate for students who may wish to become researchers or as a prerequisite for pursuing a doctoral degree. The degree is also relevant to media professionals in fields such as advertising, electronic media, journalism, public relations, publishing, or recording industries seeking to broaden their understanding of the field of mass communication and to develop skills relevant to decision making in media-related organizations.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Science in Media and Communication requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (GPA) in all coursework completed;
3. acceptable scores on the Graduate Record Examination (GRE)-a score of 291 combined on the verbal and quantitative portions of the GRE is usually required for admission to the degree program.

NOTE: ***Students may take up to 6 hours (two courses) before being admitted to the program but must do so as*** **non-degree seeking students*****. Enrollment in these courses requires the permission of the graduate director.***

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit an application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts of all previous college work;
3. submit a 500-word essay;
4. submit three letters of recommendation;
5. submit acceptable GRE scores.

Degree Requirements

The Master of Science in Media and Communication requires completion of 33 semester hours.
Candidate must

1. complete either the thesis or non-thesis curriculum as detailed below in the Curriculum section;
2. submit and defend either a written thesis or a professional project concentrating on an area of particular interest by exhibiting in-depth independent research. The thesis results in the production of traditional academic research; the professional project results in the application of research knowledge to a professional production or other project.

Curriculum: Media and Communication

The following illustrates the coursework requirements. Candidate must complete the thesis or non-thesis course of study.

Thesis Option (33 hours)

Required courses (15 hours)

- MC 6000 - The Science of Communication **3 credit hours**
- MC 6010 - Cultural Studies in Communication **3 credit hours**
- MC 6300 - Media Law and Ethics **3 credit hours**
- MC 6640 - Thesis Research **1 to 6 credit hours (6 credit hours required)**

Electives (12 hours)

- MC 5350 - Children and Media **3 credit hours**
- MC 6110 - Quantitative Research Methods **3 credit hours**
- MC 6120 - Qualitative Research Methods **3 credit hours**
- MC 6200 - Media Management **3 credit hours**
- MC 6230 - Media in the Marketplace **3 credit hours**
- MC 6250 - Media Organizations **3 credit hours**
- MC 6260 - Health Care Communication **3 credit hours**
- MC 6320 - Mass Media and Public Opinion **3 credit hours**
- MC 6380 - News, Culture, and Democracy **3 credit hours**
- MC 6400 - Communication and Technology **3 credit hours**
- MC 6430 - Special Topics in Communication **3 credit hours**

Approved Electives (6 hours)

- taken inside or outside the College of Media and Entertainment as benefits research orientation; no more than 3 credits may be taken at the 5000 level.

Non-Thesis (33 hours)

Required courses (15 hours)

- MC 6000 - The Science of Communication **3 credit hours**
- MC 6010 - Cultural Studies in Communication **3 credit hours**
- MC 6300 - Media Law and Ethics **3 credit hours**
- MC 6650 - Professional Project **1 to 6 credit hours (6 credit hours required)**

Electives (12 hours)

- MC 5350 - Children and Media **3 credit hours**
- MC 6110 - Quantitative Research Methods **3 credit hours**
- MC 6120 - Qualitative Research Methods **3 credit hours**
- MC 6200 - Media Management **3 credit hours**
- MC 6230 - Media in the Marketplace **3 credit hours**
- MC 6250 - Media Organizations **3 credit hours**
- MC 6260 - Health Care Communication **3 credit hours**
- MC 6320 - Mass Media and Public Opinion **3 credit hours**
- MC 6380 - News, Culture, and Democracy **3 credit hours**
- MC 6400 - Communication and Technology **3 credit hours**
- MC 6430 - Special Topics in Communication **3 credit hours**

Approved Electives (6 hours)

- taken inside or outside the College of Media and Entertainment as benefits research orientation; no more than 3 credits may be taken at the 5000 level

Mass Communication

MC 5240 - Television, Culture, and History
3 credit hours Examines television and streaming video as a cultural product, communication tool, "mirror on the world," and as an agent for social change. Explores censorship, sponsorship, ethics, and the impact of context on content. Uses a critical and cultural studies lens to examine the area of television studies. Studies role that television has had and continues to have on constructing notions of gender, race, class, and difference.

MC 5350 - Children and Media
3 credit hours Explores media content created for and by children, examining the many ways that graphic novels, music, social media, videos, and other forms of media influence the way that kids see the world. Topics include the history of the child consumer, children's marketing, ethics in children's media, constructions of gender, race, ability, and other positions of intersectionality, role-playing, identity, and video games, and other salient topics in this area.

MC 6000 - The Science of Communication
3 credit hours Quantitative and qualitative research dealing with the uses and effects of mass communication.

MC 6010 - Cultural Studies in Communication
3 credit hours Relationship of communication to culture with particular emphasis on the everyday life contexts of media audiences.

MC 6100 - Research Design
3 credit hours Prerequisite: Permission of graduate director. Formulating research questions, developing operational definitions, selecting measures. Analysis of surveys, observational techniques, and interpretive studies.

MC 6110 - Quantitative Research Methods
3 credit hours Prerequisite: MC 6000. Techniques of communication research emphasizing survey and experimental methods. Sampling, questionnaire construction, data gathering, and statistical methods.

MC 6120 - Qualitative Research Methods
3 credit hours Prerequisite: MC 6010. Techniques of communication research emphasizing participant observation, ethnography, and focus groups. Interviewing, observation, problems of generalization, ethics of fieldwork.

MC 6200 - Media Management
3 credit hours Prerequisite: Permission of graduate director. Application of the case study method to understanding the role of management and managers in the delivery of media to the marketplace. Application of management and organization theory to the problems of the mass media.

MC 6210 - Public Relations Management
3 credit hours A broad perspective on the field of public relations, its role in society, and the practice of public relations as a management function contributing to the development, operation, and success of organizations. Topics include historical development of the field, its current role in varied organizations, the four-stage PR management process, and the development of a strategic PR campaign plan.

MC 6230 - Media in the Marketplace
3 credit hours Prerequisite: Permission of graduate director. The use of various forms of audience research in media organizations. Social and ethical conflicts related to marketing.

MC 6240 - Social Media
3 credit hours Develops a broad understanding of both applied social media skills (content creation to social analytics) and the underlying social science theories that ground social media.

MC 6250 - Media Organizations
3 credit hours Prerequisite: Permission of graduate director. Examines the structure of media organizations. Roles of creators, producers, distributors, publics, institutional frameworks.

MC 6260 - Health Care Communication
3 credit hours Prerequisite: Permission of graduate director. Introduces the practice and study of communication as it relates to health care, including mastery of sociocultural considerations and the intersection of the health care industry with government, public, corporate, and private entities.

MC 6270 - Public Relations Storytelling
3 credit hours Prerequisite: MC 6210. Introducing the art of storytelling and its use in strategic messaging for public relations. Successful messages must captivate target audiences before they can

persuade, and this course identifies the theories and structures necessary for compelling narratives.

MC 6280 - Public Relations Theory
3 credit hours Prerequisite: MC 6210. Introduces on a detailed level the field of public relations theory applied to strategic communications in a range of industries and organizations. Looks at theories in communication, business, and ethics. Focuses on both public relations theory and the application of principles in real-world situations.

MC 6300 - Media Law and Ethics
3 credit hours Prerequisite: Permission of graduate director. An overview of the laws relating to the media. Ethical and social dimensions of law. Emphasis on case studies.

MC 6320 - Mass Media and Public Opinion
3 credit hours Prerequisite: MC 6000. Theories of democracy, the nature of a "public" and of "public opinion." Readings in the classics on mass media and democracy and in public opinion research.

MC 6380 - News, Culture, and Democracy
3 credit hours Prerequisite: MC 6010. Critical examination of the news process with attention to the relationship of economic, cultural, and political constraints.

MC 6400 - Communication and Technology
3 credit hours Prerequisite: Permission of graduate director. Readings in the cultural history of media technology explore technological change and social development as a system of interrelated social relations and practices.

MC 6430 - Special Topics in Communication
3 credit hours Prerequisite: Permission of graduate director. An in-depth analysis of one or more current issues or subdisciplines. Topics will vary from semester to semester.

MC 6500 - Public Relations Research
3 credit hours Prerequisite: Permission of director. An overview of public relations research. Design, implement, and evaluate public relations research by using qualitative and quantitative methods.

MC 6590 - Case Studies in Media Management
3 credit hours Prerequisite: Permission of graduate director. A capstone course that emphasizes the integration of communication theory and method with management philosophy in the planning of strategy for media organizations. Emphasis on case studies and student presentations. Requires consent of director of graduate studies or instructor.

MC 6600 - Seminar in Applied Research
3 credit hours Prerequisite: Permission of graduate director. A capstone course that emphasizes the application of various research methodologies to decision making in media organizations.

MC 6610 - Directed Reading and Research
3 credit hours Completion and execution of a research project under the direction of a faculty advisor. P/F grading.

MC 6640 - Thesis Research
1 to 6 credit hours Under the direction of a faculty advisor and graduate committee, the student will plan and execute an original research or creative project. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

MC 6650 - Professional Project
1 to 6 credit hours Completion and execution of a professional project under the direction of a faculty advisor and graduate committee. Once enrolled, student should register for at least one credit hour of master's project each semester until graduation. S/U grading.

MC 6999 - Comprehensive Examination and Preparation
1 credit hours Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

Recording Industry

John Merchant, chair
(615) 898-2578
recordingindustry.mtsu.edu/
The Department of Recording Industry offers the Master of Fine Arts in Recording Arts and Technologies (MRAT).

Recording Arts and Technologies, M.F.A.

Bill Crabtree, Program Director
(615) 494-7908
Bill.Crabtree@mtsu.edu
The Department of Recording Industry offers the Master of Fine Arts in Recording Arts and Technologies (MRAT) program.
The Master of Fine Arts program offers preparation for advanced work in audio production, recording, and integrated electronic media. Students develop a strong foundation in audio production and an understanding of the theoretical concepts of closely related disciplines. The program fosters creativity and offers a strong technical component, utilizing the latest advancements in software and hardware. A diverse range of technical and artistic projects are produced, culminating in a final project of professional caliber. The degree plan also offers preparation for select graduates to teach at the postsecondary level in the field of audio recording and production.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the Master of Fine Arts program in Recording Arts and Technologies requires

1. an earned bachelor's degree from an accredited university or college;
2. undergraduate preparation or significant professional experience appropriate to the graduate curriculum and a minimum overall grade point average of 3.00 in all courses attempted, excluding repeated courses;
3. a satisfactory score on the general portion of the Graduate Record Examination (GRE) that is not more than five years old. Successful applicants typically have scores of 146 verbal and 140 quantitative (current scale) or 400 (former scale) or better on the verbal and quantitative measures of the GRE, and an analytical writing score of 4 or better.

Application Procedures

***All application materials are to be submitted to the College of Graduate Studies* except the creative portfolio. The portfolio should be mailed directly to the M.F.A. director (see below).**
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official scores on the GRE;
3. submit official transcripts of all previous college work;
4. submit a formal statement of purpose addressing career goals, related work experience, and how the M.F.A. will help attain the stated career goals;
5. submit two letters of recommendation for graduate study; one letter from the undergraduate major advisor if the student is a recent graduate;
6. submit a portfolio of works representative of the candidate's creative achievements in the areas of audio recording, music, composition, video, film, or multimedia or areas strongly related to the degree curriculum. See creative portfolio format.

Curriculum: Recording Arts and Technologies

The Master of Fine Arts in Recording Arts and Technologies requires completion of 60 semester hours.

Year 1

Fall Semester

- MRAT 6040 - Digital Audio Studio Seminar **3 credit hours**
- MRAT 6050 - Multitrack Recording Seminar **3 credit hours**
- MRAT 6170 - The Art of Critical Listening **3 credit hours**

Spring Semester

- MRAT 6030 - MIDI and Music Synthesis Seminar **3 credit hours**
- MRAT 6110 - Production Seminar I **3 credit hours**
- MRAT 6140 - Graduate Seminar in Audio Recording **3 credit hours**

Year 2

Fall Semester

- MRAT 6070 - Visual Aesthetics and Technology I **3 credit hours**
- MRAT 6130 - Production Seminar II **3 credit hours**
- MRAT 6145 - Seminar in Advanced Mixing Techniques **3 credit hours**

Spring Semester

- MRAT 6090 - Visual Aesthetics and Technology II **3 credit hours**
- MRAT 6210 - Production Seminar III **3 credit hours**
- Guided elective **3 credit hours**

Year 3

Fall Semester

- MRAT 6150 - Legal Rights of the Creative Individual **3 credit hours**
- MRAT 6650 - Final Project **1 to 9 credit hours (3 credit hours required)**
- Guided elective **3 credit hours**
- Comprehensive examinations

Spring Semester

- MRAT 6650 - Final Project **1 to 9 credit hours (6 credit hours required)**
- Guided elective **3 credit hours**

Guided Electives (taken any term)

- Guided electives **6 credit hours**

Comprehensive Examinations (if necessary)

Electives

- In addition to the required courses above students must complete 15 hours of electives. Electives can be taken in any semester including summer terms.
- Guided electives are normally selected from recording arts and technologies courses; however, up to 6 hours of guided electives may be from other departments upon permission of the student's advisor. A maximum of 12 hours of 5000-level courses may be counted toward the degree***.***

Program Notes

Candidate must

1. attend full time, taking 9-12 hours per semester.
2. successfully pass the comprehensive examination before graduation.

Recording Arts and Technologies, M.F.A., ABM Pathway

Bill Crabtree, Program Director
(615) 494-7908
bill.crabtree@mtsu.edu
The Department of Recording Industry offers an Accelerated Bachelors to Masters Pathway in Recording Arts and Technologies, M.F.A., corresponding to the Audio Production, B.S.

Admission Requirements

To be eligible a student must

- have completed 75 undergraduate credit hours;
- have completed a minimum of 24 credit hours at MTSU;
- have a minimum of two semesters remaining at MTSU; and
- have an inclusive GPA of 3.25 or higher.

Additional Requirements:
Applicant must

- submit two letters of recommendation from faculty - one from Recording Industry;
- submit a Letter of Intent;
- be approved by the M.F.A. Committee.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Admission to the ABM Pathway is handled by the ABM Pathway coordinator in the department/program. Once accepted to the Pathway by the coordinator, the student will need to fill out the Accelerated Masters Program Contract.

Program Requirements

Students take 12 credit hours from the chart below. Students should consult their undergraduate advisors to ensure they are meeting all requirements for their bachelor's degrees.

MTSU Undergraduate Course	MTSU Graduate Course	Credit Hours
RIM 4300 - Advanced Pro Tools Techniques	MRAT 6040 - Digital Audio Studio Seminar	3
RIM 4650 - Multitrack Music Recording	MRAT 6050 - Multitrack Recording Seminar	3
RIM 4660 - Advanced Music Engineering	MRAT 6140 - Graduate Seminar in Audio Recording	3
RIM 4670 - Studio Production	MRAT 6110 - Production Seminar I	3

Students must complete the courses in the curriculum with the minimum GPA to qualify for the dual undergraduate/graduate credit. Once courses have been completed, and a student is set to graduate with a bachelor's degree, then the student can apply to the graduate program using the basic online application form and fee. No other application materials will be required, but students will need to provide a valid driver's license and possibly proof of in-state eligibility if needed.

Student Retention and Withdrawal Policies

Withdrawal from the Undergraduate ABM Pathway

Students may withdraw from an ABM Pathway at any time by informing the ABM Pathway coordinator and respective undergraduate program and graduate program coordinators (or designees) in writing of their intent to withdraw. Withdrawal is considered permanent, and a student who withdraws may not reenter the same ABM Pathway.

Dismissal from the ABM Pathway

Students will be dismissed from an ABM Pathway for failure to maintain satisfactory levels of academic progress, which includes

1. failure to meet the general ABM Pathway guidelines and specific program requirements;
2. failure to meet an overall undergraduate GPA of 3.0 or higher in any term;
3. interruption of the undergraduate course of study for more than three terms, without the prior consent of the undergraduate and graduate program coordinators (or designees).

Recording Arts and Technologies

MRAT 5330 - Sound Reinforcement
3 credit hours Prerequisite: MRAT 6050 with C or better. Current technologies and techniques involved in modern sound reinforcement. Topics include club venue and large concert systems. Field work required.

MRAT 5333 - Sound System Design and Optimization
3 credit hours Prerequisite: MRAT 5330 or MRAT 6125 with C or better. Focuses on the concepts and skills required to design, build, measure, and tune a large-format concert sound system. Topics include acoustic transmission, audio measurement tools and techniques, loudspeaker arrays, acoustic prediction software, coverage of performance venues, and the goals and processes for optimizing the system. Extensive demonstrations and hands-on practice with audio hardware and software provide real-world context for concepts presented in class. Individual participation in discussions and demonstrations expected.

MRAT 5335 - Advanced Sound Reinforcement
3 credit hours Prerequisite: MRAT 5330 or MRAT 6125 with C or better. Provides a more comprehensive view of sound reinforcement and live entertainment that includes rigging fundamentals, entertainment electricity, and event safety. Lectures, guest presentations, in-class participation, and group projects and experiences.

MRAT 5390 - Electronic Music and Controllerism
3 credit hours Prerequisite: MRAT 6030 with C or better. A hands-on audio production course that introduces the student to electronic music/controllerism. Students will acquire and refine digital audio stills used for desktop music production and live performance. Topics include automation, MIDI editing, audio warping, audio to MIDI conversion, making beats, and using Live's virtual instruments.

MRAT 5440 - Critical Listening
3 credit hours Prerequisite: MRAT 6050 with C or better. Ear-training and aesthetics for recording engineers. Class activities involve listening and analysis of master tape and disc formats. Sources include a wide variety of music genres as well as specialized technical ear-training materials. Development of a vocabulary for communication of aural impressions. Introduction to "high-end" audio.

MRAT 5480 - Mastering
3 credit hours Prerequisite: MRAT 6040 with C or better. An advanced hands-on approach to the principles and practices of mastering. Focuses on the use of digital audio workstations specially designed for audio mastering and related outboard equipment. Additional focus on surround mastering and DVD authoring. Laboratory required.

MRAT 5490 - Broadcast Audio Technology and Methods
3 credit hours Prerequisites: Enrollment in M.F.A. program; MRAT 6040 and MRAT 6050 with a minimum grade of C. An applications-oriented course focused on the theory and practice of audio systems, methods, workflows and evolving technologies used in professional broadcast environments, including studio-based and remotely-integrated radio and television production.

MRAT 5580 - Sound for Picture
3 credit hours Prerequisite:MRAT 6040 with C or better. In-depth, interactive study of sound and its relationship to picture. Time code, synchronization, workflow, data interchange, sound recording and editing, ADR, Foley, routing structures, sound mixing, and delivery methods. Demonstrations and lab use digital audio workstations and controllers found in professional facilities. Laboratory required.

MRAT 5585 - Advanced Sound for Picture
3 credit hours Prerequisite: MRAT 5580 or MRAT 6120 with C or better. An in-depth, interactive study of sound mixing approaches for a variety of styles of programming across different media (TV, film, web). In addition to the aesthetic aspects of mixing, discussions will include required deliverables, audio level requirements, sound formats (stereo, surround), synchronization, addressing program timing changes, picture formats, target audience considerations, problem solving, technology, and more. A hands-on class which will require assignments to be completed outside of class (as is the case with most-upper-level studio courses). Laboratory required.

MRAT 5590 - MIDI Based Scoring for Visual Media
3 credit hours Prerequisite: MRAT 6030 with C or better. Writing music for visual media using the capabilities of a computer workstation. Introduces compositional techniques utilizing Macintosh

sequencing software and QuickTime video playback in combination with synthesizers and sample playback programs. Concepts include synchronization of music to picture, tempo selection, sound source selection/manipulation, and analysis of the dramatic content of a scene. Laboratory required.

MRAT 5810 - Topics in Recording Industry
3 credit hours Prerequisites: Permission of department. Examination and critical evaluation of current issues related to operation and function of various aspects of the recording industry. Subject matter varies. Course may be repeated once for additional credit.

MRAT 6010 - Recording in Cultural Context
3 credit hours Provides students with an accelerated introduction to the field of popular music studies. Inquiry focuses on recorded music as a commodified form of commercial art and its relationship between those who make it and those who consume it. Historical, legal, and rhetorical methodologies, as well as theoretical approaches drawn from cultural studies examined.

MRAT 6030 - MIDI and Music Synthesis Seminar
3 credit hours Technical skills and conceptual foundation necessary to undertake advanced creative projects using MIDI and sound synthesis. Emphasis on mastery of hardware and software platforms including Pro Tools, Reason, Ableton, Yamaha, and Moog synthesizers and related peripherals.

MRAT 6040 - Digital Audio Studio Seminar
3 credit hours A comprehensive in-depth study of audio theory and the digital tools used to record, edit, and mix audio. Students engage in analytical problem solving using scientific foundations in audio as well as the technical skills needed to use Pro Tools in advanced production projects.

MRAT 6050 - Multitrack Recording Seminar
3 credit hours Systematic examination of the techniques and technology used in the modern recording studio environment. Emphasis placed on music recording with creative recording and mixing projects produced by each student.

MRAT 6070 - Visual Aesthetics and Technology I
3 credit hours Introduces students to the theories of visual aesthetics with regard to light, color, space, time, motion, and sound. Topics cover camera basics, lighting, and editing techniques needed to creatively capture, enhance, and manipulate these image/sound elements. Students explore the creative value of these elements through the production of several short videos.

MRAT 6090 - Visual Aesthetics and Technology II
3 credit hours Prerequisite: MRAT 6070. Continuation of MRAT 6070 with demonstration of basic and advanced visual technology as a foundation for more advanced video productions. Explores visual aesthetics theories and basic video skills applied to student produced videos and editing exercises. Designed to equip the student with more sophisticated mastery of the moving image form and its storytelling potential.

MRAT 6110 - Production Seminar I
3 credit hours Prerequisites: MRAT 6040 and MRAT 6050. Studio production course which considers the evolving role of music producer for the 21st century, including audio production techniques and the overall production process, with a focus on the aesthetic, creative, and entrepreneurial aspects of recording studios. For the semester project, students will develop better understanding of the course concepts by acting as producer for a large-format recording project.

MRAT 6120 - Sound for Visual Media
3 credit hours Prerequisite: MRAT 6040. An in-depth interactive study of sound and its relationship to the moving image. Topics include time code, synchronization, workflow, data interchange, sound recording to picture, sound editing to picture, aesthetic aspects of mixing, routing structures, required deliverables and levels, sound formats and more. Upon successful completion of this course, students will be well prepared for an internship or assistantship at an audio prod-production facility and possess the foundation for working on billable projects.

MRAT 6125 - Remote Production
3 credit hours Prerequisites: MRAT 6040 and MRAT 6050. May be repeated once with permission of instructor. Remote, field, and other non-studio-oriented audio recording applications emphasized. In-depth study, discussion, and application of techniques, equipment, interfacing with other systems, and location-oriented problem solving included. Activities may include audio only and/or audio for media applications. Participation in off-

campus, non-class-time recording opportunities required.

MRAT 6130 - Production Seminar II
3 credit hours Prerequisites: MRAT 6110 and MRAT 6140. In this second year studio production course, students produce and engineer a variety of projects for their portfolio involving multitrack pop music, acoustic drum recording, and location/classical recording. Emphasis on development of creative skills and knowledge related to music production and engineering including critical listening skills and evaluation techniques. Final project mixes submitted in stereo and surround formats.

MRAT 6140 - Graduate Seminar in Audio Recording
3 credit hours Prerequisites: MRAT 6030, MRAT 6040, and MRAT 6050. Advanced techniques and technologies used in music recording and engineering. Students assume the role of a recording engineer and work with a producer from MRAT 6110 toward the completion of an advanced multi-track music recording.

MRAT 6145 - Seminar in Advanced Mixing Techniques
3 credit hours Prerequisites: MRAT 6040, MRAT 6050, and MRAT 6140. Advanced application of audio mixing techniques, designed to develop skill sets and knowledge base related to the craft of mixing. Provides students with a means for creative self-discovery and the exploration of complex ideas. An in-depth study of core mixing skills, signal processing and their application using a variety of tools, media and approaches. Additional topics of study include applied critical listening, automation systems, focus and foundation mixing, commercial concerns, and the NARAS guidelines for exchange and delivery of recorded music projects.

MRAT 6150 - Legal Rights of the Creative Individual
3 credit hours Examines legal rights and duties of creative persons. Students apply concepts from copyright, trademark, trade secrets, privacy, publicity, defamation, and other branches of the law to media productions.

MRAT 6155 - Analog Recording
3 credit hours Prerequisites: MRAT 6050, MRAT 6110, and MRAT 6140. Applications course involving a systematic study of analog recording theories and technologies, advanced applications of analog recording equipment, and production techniques in the studio. Out-of-class labs and recording sessions required.

MRAT 6160 - Contemporary Methods of Programming and Production
3 credit hours Prerequisites: MRAT 6030 and fundamental understanding of music theory. Students will apply concepts drawn from analysis of contemporary popular music to create musical arrangements using MIDI, digital audio, and virtual instruments. Works transferred and completed using studios and musicians to replace or complement with real elements.

MRAT 6170 - The Art of Critical Listening
3 credit hours Prerequisite: MRAT 6040, MRAT 6050, and MRAT 6110. Technology of sound reproduction and principles of auditory perception as they relate to the critical and technical analysis of sound recordings. Survey of popular music production styles and activities including specialized aural skills training.

MRAT 6175 - Seminar in Sound Reinforcement
3 credit hours Prerequisites: MRAT 6040 and MRAT 6050. Introduces concepts, equipment, and procedures related to modern sound reinforcement. Students will explore these ideas using a combination of traditional and experiential learning opportunities.

MRAT 6180 - Introduction to Film Scoring
3 credit hours Prerequisites: Four semesters of theory/sight singing/ear training; MRAT 6030 and MRAT 6040. Overview of the film scoring process. Discussion of the aesthetic relationship between music and film. Thematic analyses of representative film scores. Composition exercises demonstrating traditional film scoring techniques. Application of compositional techniques through laboratory assignments using computers, synthesizers, and digital samplers. SMPTE time code, MIDI time code, and film time formats and their application to tape synchronization.

MRAT 6190 - Seminar in Mastering and Audio Restoration
3 credit hours Prerequisites: MRAT 6040 and MRAT 6050. An advanced hands-on approach to the principles and practices of mastering. Focuses on the use of digital audio workstations and related outboard equipment specially designed for audio mastering.

Additional topics include surround mastering, DVD authoring, audio restoration, and audio forensics. Laboratory required.

MRAT 6210 - Production Seminar III
3 credit hours Prerequisite: MRAT 6130 and MRAT 6145. Student recordings reviewed through regular peer presentation and critique. Students revise portfolio entries and undertake new projects in preparation for their Portfolio Jury. Students begin preparation and concept presentations for the third year MRAT 6650.

MRAT 6275 - Sound System Design and Optimization
3 credit hours Prerequisite: MRAT 6175. Focuses on the concepts and skills required to design, build, measure, and tune a large-format concert sound system. Topics include acoustic transmission, audio measurement tools and techniques, loudspeaker arrays, acoustic prediction software, coverage of performance venues, and the goals and processes for optimizing the system. Extensive demonstrations and hands-on practice with audio hardware and software provide real-world context for concepts presented in class. Individual participation in discussions and demonstrations expected.

MRAT 6300 - Advanced Studio Production
3 credit hours Prerequisite: MRAT 6140. Students produce and engineer a variety of production projects for their portfolio. Students work with songwriters and professional musicians to produce and engineer recordings of professional quality. Each state of production reviewed and critiques through faculty and peer review. Finalized productions may be included in the student's portfolio.

MRAT 6320 - Directed Research
3 credit hours Prerequisite: Permission of department. Research in recording techniques and related topics.

MRAT 6340 - Directed Production
3 credit hours Prerequisite: Permission of department. Independent advanced audio production.

MRAT 6360 - Graduate Internship
3 to 6 credit hours Prerequisite: Permission of department. Practical experience for advanced students in a professional recording industry setting. Pass/Fail.

MRAT 6650 - Final Project
1 to 9 credit hours Prerequisite: Permission of department. A directed production project of substantial size and scope proposed, developed, and realized under the guidance of the major faculty advisor in consultation with the final project faculty committee. The culminating experience in the M.F.A. program. S/U grading used.

Recording Industry

RIM 6020 - The Music Industry: Revenues, Rights, and Professions
3 credit hours Prerequisite: Enrolled in the M.B.A., Music Business program. Examines the dynamic environment called the music business. Utilizing evaluative elements of the industry (Billboard's MusicConnect, Pollstar, Performing Rights Organizations, etc.), students will review the publishing, recording, management, and touring history of an act and level of success based on current practices and genre/artist stature.

RIM 6050 - International Popular Music
3 credit hours Prerequisite: Admission to a University graduate program and permission of instructor. Explores marketing strategies, artistic representation, branding, and general exploitation of both traditional and social media and how these modes affect the construction, performance, and sale of popular music across international borders. Includes assigned readings, lectures, in-class exercises, class presentations, guest presentations, and professional group projects and experiences.

RIM 6300 - Music Entrepreneurship and Strategic Planning for the Arts
3 credit hours Prerequisite: Permission of department. Examines emerging business models, competitive and feasibility analysis, organizational structure and design, fundraising, marketing and entrepreneurship in the music industry. Students will choose to follow a "for-profit" or "non-profit" track, and develop a final project plan for a business or organization, fully annotating and creating a professional visual presentation which could ultimately be used to present to either a funding source (e.g. venture capitalists, bankers, grantors, etc.) or to the industry (e.g. potential partners, sponsors, clients).

RIM 6400 - International Entertainment Transactions
3 credit hours Prerequisite: Admission to the M.B.A. program; others - admission to a University graduate degree program and permission of department. Focuses on the critical areas of international law and business entrepreneurship as applied to the entertainment industry. Student investigates, via research and multi-national case studies, the details of what is necessary to achieve the global exploitation of creative content. Includes global research (including field research with professionals around the world) and case study reading and discussion culminating in the creation and written preparation of the Entertainment Transaction Proposal for presentation to angel investors as a start-up entity in a student-selected foreign territory.

RIM 6630 - Applied Recording Industry Research
3 credit hours Prerequisites: BIA 6000; MKT 6000; acceptance to M.B.A. program. Focuses on applied qualitative and quantitative research projects for the recording industry, with particular attention to research design and implementation.

University College

Rick Sluder, Dean
John Burchfield, Associate Dean
Peggy Carpenter, Assistant Dean
University College exists for the purpose of helping make student success possible for the traditional and nontraditional students it serves. The staff is organized within seven unique units to meet the specific needs of the community.
MTSU Online and Distance Education manages all distance courses and programs including MTSU online, hybrid, and synchronous online. Through its Faculty Services Office, MTSU Online assists faculty in the development and redesign of online courses/programs. The Student Services unit provides resources and advising for all students majoring in degrees awarded by University College.

Credit Area and Programs

MTSU Online and Distance Education

Distance Education Courses
Distance education courses, coordinated through the University College, include online, hybrid, and synchronous online.

MTSU Online Courses
All instruction takes place through MTSU's learning management system. Students are expected to have access to a computer and the Internet for completion of course requirements. Professors may offer optional meetings but students cannot be penalized for non-attendance. Proctored exams may also be offered, and students who cannot attend the scheduled dates/times have the option of taking the exam at an approved off-campus site. Students who are most successful in online courses have excellent time management skills.

MTSU Hybrid Courses
A significant portion of instruction and activities in a hybrid class takes place in an online environment. Professors may require up to 15 hours of mandatory campus meetings (for an orientation, exams, presentations) per semester for hybrid courses. Students can be penalized for non-attendance at these scheduled events.
Additional information can be found on the Course Comparison Chart located on the University College Student Services website.
NOTE: ***MTSU online and hybrid courses may be used to satisfy some requirements for any degree offered at MTSU. Some degrees can be earned completely online***

MTSU Online and Hybrid Graduate Degree Programs
For the most current information on online graduate programs, see MTSU Online. For information on graduate hybrid programs, see Hybrid Programs.

Synchronous Online Courses

Synchronous online courses are accessed over the Internet typically through MTSU's course management system. Synchronous online classes meet online at the time/days of the week specified in PipelineMT. A reliable computer with at minimum a DSL Internet (broadband) connection is needed to successfully access synchronous online course sessions. Hardware requirements include headphones, earbuds, speakers, and may include a microphone and/or web cam. During the class, students can hear and/or see the professor, and communication with the professor may take place through a microphone or text chat window. Only students with strong experience on the Internet should register for a synchronous online course. Courses may require proctored exams. Additional information may be obtained at Distance Course Definitions.

Accelerated Online Courses

Accelerated Online Courses are offered in two eight-week blocks each Fall and Spring semester. Students may take only up to 9 hours in each block (parts of term A1 and A2). Students may mix accelerated courses with full-term courses (not to exceed 18 hours total) and must register for A2 courses during regular registration. Special permission is required to add A2 part-of-term courses after late registration ends. Accelerated Online Courses may include optional orientations and proctored exams.

Academic Outreach/Adult Degree Completion Program (ADCP)

Summer Sessions

Accelerated Online Courses are offered in two eight-week blocks each Fall and Spring semester. Students may take only up to 9 hours in each block (parts of term A1 and A2). Students may mix accelerated courses with full-term courses (not to exceed 18 hours total) and must register for A2 courses during regular registration. Special permission is required to add A2 part-of-term courses after late registration ends. Accelerated Online Courses may include optional orientations and proctored exams. www.mtsu.edu/summer.

University Studies Department

The University Studies Department of the University College is committed to providing a firm foundation on which the students it serves can build a clear pathway leading to success within the university structure. Dedicated faculty and staff provide targeted instruction, support, and direction to entering students and those pursuing a Bachelor of Science or a Master's degree. More information is available by visiting www.mtsu.edu/university-college/university-studies/ or visiting University Studies. Students may also contact the University Studies Department at (615) 898-2568.

Experiential Learning Scholars Program (EXL)

The Experiential Learning Scholars Program formalizes and organizes several existing experiential learning activities such as study abroad and cooperative education and new experiential opportunities into a comprehensive program of study for students. Students formally admitted to the EXL Scholars Program must complete several activities: EXL coursework, an external service component, an MTSU internal service component, and assessment activities (including development of an e-portfolio). After their completion of EXL program requirements, students will receive an EXL Scholar designation on their transcripts and will wear special cords at commencement to signify their achievement. Some students may elect to take EXL courses, but may not complete all the requirements for the EXL Scholars Program transcript designation. More information can be found at www.mtsu.edu/exl/.

More Information

More information can be obtained by contacting the University College, (615) 494-7714. Additional information may be obtained by visiting www.mtsu.edu/university-college/.

Professional Studies, Human Resources Leadership Concentration, M.P.S.

Pamela D. Morris, Program Director
(615) 898-5920
Pamela.Morris@mtsu.edu
The University College offers the Master of Professional Studies (M.P.S.) with concentrations in Human Resources Leadership, Leadership in Nutrition, Operations Research, Strategic Leadership, and Training and Development. For more information, contact Pamela.Morris@mtsu.edu, call (615) 898-5920, or visit www.mtsu.edu/mps.

Admission Requirements

Admission to the Master of Professional Studies program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (GPA) in all college work taken (at least 2.75 for unconditional admission);
3. three (3) letters of recommendation;
4. completion of a portfolio of works OR Graduate Record Examination (GRE) based on criteria below:
    a. completion of a portfolio of works for those with a 3.25 GPA or higher; OR
    b. completion of a portfolio of works for those with a 2.75 GPA or higher and five (5) years of professional full-time work experience; OR
    c. completion of the GRE General Test with acceptable scores;
5. competency in word processing, library retrieval systems, presentation graphics, spreadsheets, and databases. Students must be computer literate (using email, posting discussions, using chat, web page navigation, uploading attachments, etc.) as well as have excellent time management skills in order to be successful in the online course environment;
6. regular access to a computer and reliable Internet connection.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference;
4. submit official scores on the Graduate Record Exam (GRE). A composite GRE score of 291 is expected for consideration of unconditional admission. applicants with a 2.75 GPA or higher and five (5) years of professional full-time work experience may submit a portfolio of works in place of a GRE score. Applicants who meet this requirement may inquire about the portfolio requirements by e-mailing Pamela.Morris@mtsu.edu or going to www.mtsu.edu/university-college/mps/portfolio.php.

Degree Requirements

The Master of Professional Studies with a concentration in Human Resources Leadership requires completion of a minimum of 30 semester hours.
Candidate must

1. complete a minimum of 30 semester hours of graduate credit (See Curriculum section below for specifics.);
2. complete a professional project during the final semester of the program.

Curriculum: Professional Studies, Human Resources Leadership

The following illustrates the minimum coursework requirements.

Core Courses (12 hours)

- PRST 6000 - Leading Organizational Transformation **3 credit hours**
- PRST 6100 - Professional Environment: Issues and Ethics **3 credit hours**
- PRST 6300 - Research Methods **3 credit hours**
- PRST 6600 - Statistical Analysis **3 credit hours**

Human Resources Leadership Concentration (15 hours)

Human Resources Theory (9 hours)

- BCED 6680 - Women and Minorities in Business **3 credit hours**
- BLAW 6520 - Current Legal Topics in Corporate Governance, Risk Management and Fraud **3 credit hours**
- MGMT 6680 - Seminar in Human Resources Management **3 credit hours**

Leadership Theory (3 hours)

Choose one:

- MGMT 6740 - Leadership and Motivation **3 credit hours**
- PRST 5510 - Using Teams to Facilitate Organizational Development **3 credit hours**

Specialty Elective (3 hours)

Choose one:

- BCED 5660 - Corporate Communication **3 credit hours**
- COMM 6650 - Conflict Management and Resolution **3 credit hours**
- HSC 6530 - Effective Program Management **3 credit hours**
- PRST 6400 - Instructional Design for Training and Development **3 credit hours**

Professional Project (3 or 4 hours)

- PRST 6998 - Professional Project **3 to 4 credit hours**
  PRST 6998 must be taken during the final semester of the program. Students should begin planning their projects when they enter the M.P.S. program. They should consult their advisors about appropriate topics and submit their proposals for approval prior to entering this course. Students applying for EXL Scholar Designation should take EXL 6000 for 1 credit hour.

NOTE:

MPS students are limited to no more than 6 hours of prior learning assessment (PLA) credit and transfer credit combined.

Professional Studies, Leadership in Nutrition Concentration, M.P.S.

Pamela D. Morris, Program Director
(615) 898-5920
Pamela.Morris@mtsu.edu
The University College offers the Master of Professional Studies (M.P.S.) with concentrations in Human Resources Leadership, Leadership in Nutrition, Operations Research, Strategic Leadership, and Training and Development. For more information, contact Pamela.Morris@mtsu.edu, call (615) 898-5920, or visit www.mtsu.edu/mps.
If you are not currently a registered dietitian, this program is not accredited by the Accreditation Council for Education in Nutrition and Dietetics. It does not provide eligibility to complete a dietetic internship or to take the registration exam for dietitians. MTSU does provide an accredited program to meet those needs. Please go to mtsu.edu/programs/dietetics/about for more information.

Admission Requirements

Admission to the Master of Professional Studies program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (GPA) in all college work taken (at least 2.75 for unconditional admission);
3. three (3) letters of recommendation;
4. completion of a portfolio of works OR Graduate Record Examination (GRE) based on criteria below:
    a. completion of a portfolio of works for those with a 3.25 GPA or higher; OR
    b. completion of a portfolio of works for those with a 2.75 GPA or higher and five (5) years of professional full-time work experience; OR
    c. completion of the GRE General Test with acceptable scores;
5. competency in word processing, library retrieval systems, presentation graphics, spreadsheets, and databases. Students must be computer literate (using email, posting discussions, using chat, web page navigation, uploading attachments, etc.) as well as have excellent time management skills in order to be successful in the online course environment;
6. regular access to a computer and reliable Internet connection.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference;
4. submit official scores on the Graduate Record Exam (GRE). A composite GRE score of 291 is expected for consideration of unconditional admission. applicants with a 2.75 GPA or higher and five (5) years of professional full-time work experience may submit a portfolio of works in place of a GRE score. Applicants who meet this requirement may inquire about the portfolio requirements by e-mailing Pamela.Morris@mtsu.edu or going to www.mtsu.edu/university-college/mps/portfolio.php.

Degree Requirements

The Master of Professional Studies with a concentration in Leadership in Nutrition requires completion of 30 semester hours.
Candidate must

1. complete 30 semester hours of graduate credit (See Curriculum section below for specifics.);
2. complete a professional project during the final semester of the program.

Curriculum: Professional Studies, Leadership in Nutrition

The following illustrates the coursework requirements.

Core Courses (12 hours)

- PRST 6000 - Leading Organizational Transformation **3 credit hours**
- PRST 6100 - Professional Environment: Issues and Ethics **3 credit hours**
- PRST 6300 - Research Methods **3 credit hours**
- PRST 6600 - Statistical Analysis **3 credit hours**

Leadership in Nutrition Concentration (15 hours)

Leadership (3-6 hours)

- BCED 5660 - Corporate Communication **3 credit hours**
- COMM 6650 - Conflict Management and Resolution **3 credit hours**
- HSC 6530 - Effective Program Management **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**
- PRST 5510 - Using Teams to Facilitate Organizational Development **3 credit hours**

Nutrition (9-12 hours)

- NFS 6100 - Advanced Studies in Food and Culture **3 credit hours**
- NFS 6200 - Current Issues in Macronutrients **3 credit hours**
- NFS 6210 - Current Issues in Micronutrients **3 credit hours**
- NFS 6290 - Dietetic Internship **6 credit hours**
- NFS 6300 - Entrepreneurial Skills for Nutrition Professionals **3 credit hours**
- NFS 6600 - Nutrition and Obesity **3 credit hours**

Professional Project (3 or 4 hours)

- PRST 6998 - Professional Project **3 to 4 credit hours**
  PRST 6998 must be taken during the final semester of the program. Students should begin planning their projects when they enter the M.P.S. program. They should consult their advisors about appropriate topics and submit their proposals for approval prior to entering this course.
  Students applying for EXL Scholar Designation should take EXL 6000 for 1 credit hour.

NOTE:

MPS students are limited to no more than 6 hours of prior learning assessment (PLA) credit and transfer credit combined.

Professional Studies, Operations Research Concentration, M.P.S.

Pamela D. Morris, Program Director
(615) 898-5920
Pamela.Morris@mtsu.edu
The University College offers the Master of Professional Studies (M.P.S.) with concentrations in Human Resources Leadership, Leadership in Nutrition, Operations Research, Strategic Leadership, and Training and Development. For more information, contact Pamela.Morris@mtsu.edu, call (615)898-5920, or visit www.mtsu.edu/mps.

Admission Requirements

Admission to the Master of Professional Studies program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (GPA) in all college work taken (at least 2.75 for unconditional admission);
3. three (3) letters of recommendation;
4. completion of a portfolio of works OR Graduate Record Examination (GRE) based on criteria below:
    a. completion of a portfolio of works for those with a 3.25 GPA or higher; OR
    b. completion of a portfolio of works for those with a 2.75 GPA or higher and five (5) years of professional full-time work experience; OR
    c. completion of the GRE General Test with acceptable scores.
5. competency in word processing, library retrieval systems, presentation graphics, spreadsheets, and databases. Students must be computer literate (using email,posting discussions, using chat, web page navigation, uploading attachments, etc.) as well as have excellent time management skills in order to be successful in the online course environment;
6. regular access to a computer and reliable Internet connection.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.

1. Applicant must submit application with the appropriate application fee (online at www.mtsu.edu/graduate/apply.php). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference;
4. submit official scores on the Graduate Record Exam (GRE). A composite GRE score of 291 is expected for consideration of unconditional admission. Applicants with a 2.75 GPA or higher and five (5) years of professional full-time work experience may submit a portfolio of works in place of a GRE score. Applicants who meet this requirement may inquire about the portfolio requirements by e-mailing Pamela.Morris@mtsu.edu or going to www.mtsu.edu/university-college/mps/portfolio.php.

Degree Requirements

The Master of Professional Studies with a concentration in Operations Research requires completion of minimum of 30 semester hours.
Candidate must

1. complete a minimum of 30 semester hours of graduate credit (See Curriculum section below for specifics):
2. complete a professional project during the final semester of the program.

Curriculum: Professional Studies, Operations Research

The following illustrates the minimum coursework requirements.

Core Courses (12 hours)

- PRST 6000 - Leading Organizational Transformation **3 credit hours**
- PRST 6100 - Professional Environment: Issues and Ethics **3 credit hours**
- PRST 6300 - Research Methods **3 credit hours**
- PRST 6600 - Statistical Analysis **3 credit hours**

Operations Research Concentration (9 hours)

- BIA 6905 - Applied Business Analytics **3 credit hours**
- HSC 6530 - Effective Program Management **3 credit hours**
- PRST 6320 - Effective Techniques in Survey Design and Implementation **3 credit hours**

Specialization Electives (6 hours)

- BCED 5660 - Corporate Communication **3 credit hours**
- BIA 6910 - Business Intelligence **3 credit hours**
- COMM 6650 - Conflict Management and Resolution **3 credit hours**
- PRST 6770 - Computer-based Decision Modeling **3 credit hours**

Professional Project (3 or 4 hours)

- PRST 6998 - Professional Project **3 to 4 credit hours**
  PRST 6998 must be taken during the final semester of the program. Students should begin planning their projects when they enter the M.P.S. program. They should consult their advisors about appropriate topics and submit their proposals for approval prior to entering this course.
  Students applying for EXL Scholar Designation should take EXL 6000 for 1 credit hour.

Professional Studies, Strategic Leadership Concentration, M.P.S.

Pamela D. Morris, Program Director
(615) 898-5920
Pamela.Morris@mtsu.edu
The University College offers the Master of Professional Studies (M.P.S.) with concentrations in Human Resources Leadership, Leadership in Nutrition, Operations Research, Strategic Leadership, and Training and Development. For more information, contact Pamela.Morris@mtsu.edu, call (615) 898-5920, or visit www.mtsu.edu/mps.

Admission Requirements

Admission to the Master of Professional Studies program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (GPA) in all college work taken (at least 2.75 for unconditional admission);
3. three (3) letters of recommendation;
4. completion of a portfolio of works OR Graduate Record Examination (GRE) based on criteria below:
    a. completion of a portfolio of works for those with a 3.25 GPA or higher; OR
    b. completion of a portfolio of works for those with a 2.75 GPA or higher and five (5) years of professional full-time work experience; OR
    c. completion of the GRE General Test with acceptable scores;
5. competency in word processing, library retrieval systems, presentation graphics, spreadsheets, and databases. Students must be computer literate (using email, posting discussions, using chat, webpage navigation, uploading attachments, etc.) as well as have excellent time management skills in order to be successful in the online course environment;
6. regular access to a computer and reliable Internet connection.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference;
4. submit official scores on the Graduate Record Exam (GRE). A composite GRE score of 291 (current scale) or 900 (former scale) is expected for consideration of unconditional admission. Applicants with a 2.75 GPA or higher and five (5) years of professional full-time work experience may submit a portfolio of works in place of a GRE score. Applicants who meet this requirement may inquire about the portfolio requirements by e-mailing Pamela.Morris@mtsu.edu or going to www.mtsu.edu/university-college/mps/portfolio.php.

Degree Requirements

The Master of Professional Studies with a concentration in Strategic Leadership requires completion of a minimum of 30 semester hours.
Candidate must

1. complete a minimum of 30 semester hours of graduate credit (see Curriculum section below for specifics);
2. complete a professional project during the final semester of the program.

Curriculum: Professional Studies, Strategic Leadership

The following illustrates the minimum coursework requirements.

Core Courses (12 hours)

- PRST 6000 - Leading Organizational Transformation **3 credit hours**
- PRST 6100 - Professional Environment: Issues and Ethics **3 credit hours**
- PRST 6300 - Research Methods **3 credit hours**
- PRST 6600 - Statistical Analysis **3 credit hours**

Strategic Leadership Concentration (15 hours)

At least five courses must be completed, including at least one course from each of the four subject areas.

Leadership Theory

- HSC 6530 - Effective Program Management **3 credit hours**
- MGMT 6740 - Leadership and Motivation **3 credit hours**

Organizational Structure and Change

- PRST 5510 - Using Teams to Facilitate Organizational Development **3 credit hours**
- PRST 6800 - Organizational Skills and Development **3 credit hours**

Communication

- BCED 5660 - Corporate Communication **3 credit hours**
- COMM 6650 - Conflict Management and Resolution **3 credit hours**

Strategic Planning and Assessment

- MGMT 6680 - Seminar in Human Resources Management **3 credit hours**
- PRST 6770 - Computer-based Decision Modeling **3 credit hours**

Professional Project (3 or 4 hours)

- PRST 6998 - Professional Project **3 to 4 credit hours**
  PRST 6998 must be taken during the final semester of the program. Students should begin planning their projects when they enter the M.P.S. program. They should consult their advisors about appropriate topics and submit their proposals for approval prior to entering this course. Students applying for EXL Scholar Designation should take EXL 6000 for 1 credit hour.

NOTE:

MPS students are limited to no more than 6 hours of prior learning assessment (PLA) credit and transfer credit combined.

Professional Studies, Training and Development Concentration, M.P.S.

Pamela D. Morris, Program Director
(615) 898-5920
Pamela.Morris@mtsu.edu
The University College offers the Master of Professional Studies (M.P.S.) with concentrations in Human Resources Leadership, Leadership in Nutrition, Operations Research, Strategic Leadership, and Training and Development. For more information, contact Pamela.Morris@mtsu.edu, call (615) 898-5920, or visit www.mtsu.edu/mps.

Admission Requirements

Admission to the Master of Professional Studies program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average (GPA) in all college work taken (at least 2.75 for unconditional admission);
3. three (3) letters of recommendation;
4. completion of a portfolio of works OR Graduate Record Examination (GRE) based on criteria below:
    1. completion of a portfolio of works for those with a 3.25 GPA or higher; OR
    2. completion of a portfolio of works for those with a 2.75 GPA or higher and five (5) years of professional full-time work experience; OR
    3. completion of the GRE General Test with acceptable scores;
5. competency in word processing, library retrieval systems, presentation graphics, spreadsheets, and databases. Students must be computer literate (using e-mail, posting discussions, using chat, webpage navigation, uploading attachments, etc.) as well as have excellent time management skills in order to be successful in the online course environment;
6. regular access to a computer and reliable Internet connection.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**). Once this initial application has been accepted, the applicant will receive directions on how to enter the graduate portal to be able to submit other materials.
2. submit official transcripts from all collegiate institutions attended;
3. submit three letters of reference;
4. submit official scores on the Graduate Record Exam (GRE). A composite GRE score of 291 (current scale) or 900 (former scale) is expected for consideration of unconditional admission. Applicants with a 2.75 GPA or higher and five (5) years of professional full-time work experience may submit a portfolio of works in place of a GRE score. Applicants who meet this requirement may inquire about the portfolio requirements by e-mailing Pamela.Morris@mtsu.edu or going to www.mtsu.edu/university-college/mps/portfolio.php.

Degree Requirements

The Master of Professional Studies with a concentration in Training and Development requires completion of a minimum of 30 semester hours.
Candidate must

1. complete a minimum of 30 semester hours of graduate credit (see Curriculum section below for specifics);
2. complete a professional project during the final semester of the program.

Curriculum: Professional Studies, Training and Development

The following illustrates the minimum coursework requirements.

Core Courses (12 hours)

- PRST 6000 - Leading Organizational Transformation **3 credit hours**
- PRST 6100 - Professional Environment: Issues and Ethics **3 credit hours**
- PRST 6300 - Research Methods **3 credit hours**
- PRST 6600 - Statistical Analysis **3 credit hours**

Training and Development Concentration (12 hours)

- HSC 6530 - Effective Program Management **3 credit hours**
- PRST 6400 - Instructional Design for Training and Development **3 credit hours**
- PRST 6410 - Evaluation of Learning **3 credit hours**
- PRST 6470 - Facilitation of Learning **3 credit hours**

Specialization Option (3 hours)

Students will select at lease one of the following courses:

- BCED 5660 - Corporate Communication **3 credit hours**
- BCED 6680 - Women and Minorities in Business **3 credit hours**
- BLAW 6520 - Current Legal Topics in Corporate Governance, Risk Management and Fraud **3 credit hours**
- MGMT 6680 - Seminar in Human Resources Management **3 credit hours**

Professional Project (3 or 4 hours)

- PRST 6998 - Professional Project **3 to 4 credit hours**
  PRST 6998 must be taken during the final semester of the program. Students should begin planning their projects when they enter the M.P.S. program. They should consult their advisors about appropriate topics and submit their proposals for approval prior to entering this course.
  Students applying for EXL Scholar Designation should take EXL 6000 for 1 credit hour.

NOTE:

MPS students are limited to no more than 6 hours of prior learning assessment (PLA) credit and transfer credit combined.

Gerontology Certificate

Brandon Wallace, Program Director
(615) 898-2509
Brandon.Wallace@mtsu.edu
The certificate program in Gerontology provides supplementary education in gerontology for students preparing for careers in a broad range of positions. This program is also designed to give those already working in the field an opportunity to enrich existing skills and knowledge and to provide further opportunities for career advancement.

Admission Requirements

Admission to the graduate certificate program requires an earned bachelor's degree from an accredited university or college with an undergraduate grade point average of 2.75 or higher (4.0 scale).

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit official transcripts of all previous college work;
3. submit a letter demonstrating their interest, detailing prior field experience, and outlining career goals and aspirations.

Certificate Requirements

Candidate must

1. complete 15 hours of graduate courses (see Curriculum section below for specifics);
2. maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate.

Curriculum: Gerontology

Candidate must complete 15 hours in the following course of study:

Core Requirement (3 hours)*

- PSY 5610 - Adult Development and Aging **3 credit hours** OR
- SOC 5020 - Sociology of Aging **3 credit hours** OR
- SOC 6550 - Seminar on Aging **3 credit hours**

*Note:

All students are required to complete at least one core course.

Electives (12 hours)

The remaining hours are to be selected from the following courses in conjunction with career goals and aspirations. Additional core courses may be completed as electives.

- CDFS 5390 - Families in Later Life **3 credit hours**
- CDFS 5391 - Aging Health and Development **3 credit hours**
- CDIS 5800 - Speech and Language Disorders in the Adult Population **3 credit hours**

- LSM 5380 - Disabilities and Diversity in Leisure, Sport and Tourism **3 credit hours**
- LSM 5470 - Leisure and Aging **3 credit hours**
- NFS 5210 - Nutrition in Aging **3 credit hours**
- PSY 5610 - Adult Development and Aging **3 credit hours**
- PSY 5630 - Death and Dying **3 credit hours**
- SOC 5020 - Sociology of Aging **3 credit hours**
- SOC 5030 - Topics in Gerontology **3 credit hours**
- SOC 5040 - Health Care Delivery Issues **3 credit hours**
- SOC 5800 - Special Projects **1 to 3 credit hours**
- SOC 6510 - Independent Study **3 credit hours**
- SOC 6550 - Seminar on Aging **3 credit hours**
- SOC 6661 - Program Evaluation **3 credit hours**
- SOC 6670 - Mental Health and Aging **3 credit hours**
- SOC 6900 - Practicum: Applied Analysis **3 credit hours**

Program Notes

Students with little or no experience working with the elderly are encouraged to complete SOC 6900 - Practicum: Applied Analysis. Special projects, independent study, and thesis research may also be counted toward the certificate with approval of the program director.
Students may transfer up to six (6) credit hours of approved coursework into the certificate program. The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.
Candidate must file a Notice of Intent to Graduate form in the College of Graduate Studies within the first two weeks of the semester in which candidate intends to graduate.

Women's and Gender Studies Certificate

Vicky McLean, Program Director
(615) 898-5910
Vicky.Maclean@mtsu.edu
The certificate program in Women's and Gender Studies seeks to provide students with knowledge of fundamental issues in sex and gender and how these are reflected in culture across time; how they shape institutions as well as personal experience; how they interact with issues such as ethnicity, race, and socioeconomic class; how new ways of thinking about gender challenge the processes by which knowledge about human beings and our behavior is acquired, interpreted, and transmitted; and how to do research within the field and apply this knowledge to one's personal and professional life.
Please see undergraduate catalog for information regarding undergraduate programs.

Admission Requirements

Admission to the graduate certificate program requires

1. an earned bachelor's degree from an accredited university or college;
2. an acceptable grade point average in all college work taken.

Application Procedures

All application materials are to be submitted to the College of Graduate Studies.
Applicant must

1. submit application with the appropriate application fee (online at **www.mtsu.edu/graduate/apply.php**);
2. submit official transcripts of all previous college work;
3. submit a current resume;
4. submit a letter of interest and goals;
5. successfully complete "Introduction to Women's studies" or an equivalent course or have experience deemed acceptable by the admissions committee;
6. submit two letters of reference.

Certificate Requirements

Candidate must

1. complete 18 hours of graduate courses, with at least 12 hours at the 6000 level (see Curriculum section below for specifics);
2. maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate.

Curriculum: Women's and Gender Studies

Candidate must complete 18 hours in the following course of study:

Required Courses (9 hours)

- WGST 6000 - Feminist Theory **3 credit hours**
- WGST 6010 - Feminist Methods **3 credit hours**

- WGST 6020 - Internship in Women's and Gender Studies **3 credit hours** OR
- WGST 6021 - Directed Reading and Research **3 credit hours**

Electives (9 hours)

Approved courses must be taught by a WGST graduate faculty member to count towards the certificate.

5000-level Courses

- CDFS 5140 - Violence in the Family **3 credit hours**
- HIST 5775 - U.S. Women's History **3 credit hours**
- HIST 5810 - History of Women in the Third World **3 credit hours**
- MUHL 5810 - Women in Music **3 credit hours**
- PSY 5620 - Psychology of Women **3 credit hours**
- SOC 5140 - Violence in the Family **3 credit hours**
- SOC 5150 - Topics in Sociology **3 credit hours**
- SOC 5361 - Contemporary Issues in Women's Health **3 credit hours**

6000/7000-level Courses

- BCED 6680 - Women and Minorities in Business **3 credit hours**
- ENGL 6415 - Special Topics in Women's Literature **3 credit hours** (approved topics only)
- ENGL 6405 - Studies in Contemporary Drama **3 credit hours** (approved topics only)
- ENGL 6611 - Special Topics in Literature and Language **3 credit hours** (approved topics only)
- ENGL 7415 - Special Topics in Women's Literature **3 credit hours** (approved topics only)
- ENGL 7405 - Studies in Contemporary Drama **3 credit hours** (approved topics only)
- ENGL 7611 - Special Topics in Language and Literature **3 credit hours** (approved topics only)
- HIST 6104 - Seminar: Topics in American History **3 credit hours** (approved topics only)
- HIST 6204 - Seminar: Topics in European History **3 credit hours** (approved topics only)
- HIST 7104 - Seminar: Topics in American History **3 credit hours** (approved topics only)
- HIST 7204 - Seminar: Topics in European History **3 credit hours** (approved topics only)
- PSY 6730 - Literature Review and Reading in Psychology: Personality **1 to 3 credit hours**
- SOC 6540 - Topics in Crime and Deviance **3 credit hours** (approved topics only)
- SOC 6545 - Topics in Gender **3 credit hours** (approved topics only)
- SOC 6650 - Contemporary Social Issues **3 credit hours** (approved topics only)
- WGST 6000 - Feminist Theory **3 credit hours**
- WGST 6010 - Feminist Methods **3 credit hours**
- WGST 6020 - Internship in Women's and Gender Studies **3 credit hours**
- WGST 6021 - Directed Reading and Research **3 credit hours**

Program Notes

Students may transfer up to six (6) credit hours of approved coursework into the certificate program. The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses.
Candidate must file a Notice of Intent to Graduate form in the College of Graduate Studies within the first two weeks of the semester in term in which candidate intends to graduate.

WGST 6000 - Feminist Theory
3 credit hours Study of selected theorists with a focus on the way women's voices contribute to the social, political, and ideological discourses addressing fundamental issues in sex and gender reflected in culture across time; how the contributions of feminist theory interact with ethnicity, race, and socioeconomic class and shape personal experience.

WGST 6010 - Feminist Methods
3 credit hours Sharpens student awareness of feminist critiques and approaches to research methods across the disciplines. Through readings and discussions, students reflect upon how researchers seek knowledge for emancipation, culminating in a research proposal in their areas of interest.

WGST 6020 - Internship in Women's and Gender Studies
3 credit hours Prerequisites: Permission of WGST director and an internship coordinator, and a minimum grade of B- in WGST 6000 and WGST 6010. The course provides work experience in an area of employment related to women's and gender studies.

WGST 6021 - Directed Reading and Research
3 credit hours Prerequisites: Permission of WGST director and supervising faculty. Students enrolled in the Graduate Certificate must earn a minimum grade of B- in WGST 6000 and WGST 6010. The course provides individually supervised reading and research in a focused topic or research project in an area of women's and gender studies not covered in depth in other Women's Studies courses.

WGST 6030 - Global Perspectives on Gender and Sexualities
3 credit hours Focuses on the study of gender, sexuality, and feminism in a comparative and global framework to investigate how constructions of gender and sexuality and understandings and practices of feminism vary across cultures.