MASTER'S DEGREES

Master's Degree Programs
Missouri S&T offers the master of science degree, the master of business administration degree (MBA), the master of engineering degree, the master of science for teachers degree, and the master of arts degree (offered in cooperation with the University of Missouri-St. Louis).

The information provided in this section outlines the minimum requirements established by the graduate faculty of the Missouri University of Science and Technology. Individual programs may have additional requirements set by the academic department. More information about each specific degree program is available on the departmental websites and in the areas of study sections of this catalog.

Time Limits
Once admitted to a master’s program, a student will be given six years to complete the program. A student may take a leave of absence, up to one year only, which will not count toward the six-year time limit. To apply for a leave of absence the student must consult with their academic advisor to complete the Leave of Absence Request form and submit for approval, first to the department chair and then to the vice chancellor of research and graduate studies.

Plan of Study
During the semester a student will have completed nine hours of graduate credit, the student must formally plan the remainder of their graduate program in consultation with their academic advisor (and selected committee members, if applicable), and submit a Form 1 for approval, first to the department chair and then to the vice chancellor of research and graduate studies. Within that semester, the office of graduate studies will place a registration hold on the student’s account for the following semester, which will be released upon acceptance of the Form 1. Courses applied toward one master’s degree cannot also be applied toward another master’s degree.

A student will be formally accepted as a candidate for a master’s degree after their Form 1 has been approved by the academic advisor (and advisory committee, if applicable), the department chair, and the vice chancellor of research and graduate studies.

If changes to the approved Form 1 occur at any time, the candidate must submit a Form 1-A to revise their approved plan of study.

Academic Advisor Requirements
All students pursuing a master’s degree will have an academic advisor (and co-advisor, if applicable) who must be a member of the Missouri S&T graduate faculty. If the academic advisor does not hold an appointment in the student’s academic department, a faculty member in that department must be designated as a co-advisor.

Transferring Credits
A maximum of nine credit hours of coursework may be transferred from another university as long as these credits have not been used to meet the requirements of another degree and were registered as graduate credit when they were taken. Students must have earned at least a B grade or equivalent for all courses to be transferred to a Missouri S&T master’s program, and must be entered as part of the student’s plan of study on the Form 1/1-A. The Missouri S&T equivalent must be stated, and a transcript that includes the course(s) to be transferred should accompany the Form 1/1-A. Approval of the Form 1/1-A will allow the transferred course(s) to be entered on the student’s Missouri S&T transcript, but only after the registrar’s office has received the student’s official transcript(s) from their previous school(s).

Earning a Second/Subsequent Master’s Degree
A student who has earned a master’s degree at Missouri S&T or elsewhere in one major shall be eligible to earn a second/subsequent master’s degree in another area upon satisfactory completion of a minimum of twenty-four additional hours of graduate credit (thesis or non-thesis). The plan of study (Form 1/1-A) must include a minimum of eighteen credit hours of 4000-, 5000-, and 6000-level lecture courses (1000/2000-level courses cannot be included). A minimum of six credit hours of the required coursework must come from the group of 6000-level lecture courses. Additionally, for a second/subsequent master’s degree with a thesis, a minimum of six credit hours of graduate research is required.

Master of Science Degree with Thesis
The master of science degree with thesis is designed for students who wish to earn an advanced degree while conducting original research under their academic advisor. The research during this program will culminate into a thesis that is likely to be published, and students will be required to present their thesis in an oral defense. This program gives students the opportunity to sharpen their research, writing, and presentation skills, and is a great option for those going into research-intensive fields or planning to pursue a doctoral degree.

General Requirements for the Master of Science Degree with Thesis
The master of science degree with thesis requires a minimum of thirty hours of graduate credit. The plan of study (Form 1/1-A) must include a minimum of eighteen credit hours of 4000-, 5000-, and 6000-level lecture courses (1000/2000-level courses cannot be included). A minimum of six credit hours of the required coursework must come from the group of 6000-level lecture courses. Additionally, a minimum of six credit hours of graduate research is required. If a student has co-advisors in different departments, the student’s graduate research credit may be shared by all departments involved.

Research will normally be conducted on the Missouri S&T campus, but in special cases, all or part of the research may be conducted elsewhere. Off-campus research must have the prior written approval of the student’s academic advisor, department chair, and the vice chancellor of research and graduate studies (the application to do non-resident research is available at http://grad.mst.edu/currentstudents/forms/). Care must be taken to ensure that an off-campus research endeavor will result in educational experiences equivalent or superior to those that a student might expect to have at Missouri S&T.

Committee Requirements for the Master of Science Degree with Thesis
For students pursuing the master of science degree with thesis, the committee will be designated on the plan of study (Form 1/1-A). The committee must consist of a minimum of three members. The academic advisor will serve as the chairperson of the thesis advisory committee. The advisor and at least half of the other committee members must be members of Missouri S&T graduate faculty. If a committee member is not a member of the Missouri S&T graduate faculty, a vita verifying
equivalent level (or higher) of education must be provided with the Form 1/1-A.

Students are encouraged to make effective use of their advisory committee members by:

- Submitting a written description of the proposed research to the members of the committee as soon as the topic is decided.
- Obtaining written approval of the committee indicating that the proposed research is of the appropriate level of caliber.
- Submitting periodic progress reports to the committee and discussing these reports with individual committee members or with the committee as a group. The frequency of reports and the method of discussion should be determined by the committee.

Thesis
The findings and results of research undertaken by the candidate must be presented in a written thesis. The thesis should embody the results of an original investigation and must represent significant, creative, and independent work. A manual entitled “Thesis & Dissertation Specifications” is available at http://grad.mst.edu/currentstudents/thesisdissertationinformation/formatting/. This manual outlines the specific requirements for the thesis.

Final Examination (Defense)
When the thesis is completed the candidate arranges a date, time, and location for the final examination (defense) of the thesis and distributes a copy to each member of their advisory committee at least seven days prior. The defense should be scheduled only during days the university is conducting normal business operations, and the candidate must be enrolled at the time of the defense.

The defense may be comprehensive in character, and the candidate should be able to demonstrate an acceptable level of knowledge of a professional area, as defined by their degree program. The defense must be presented as an oral examination and attendees may question the candidate with the permission of the chair of the advisory committee.

A candidate will be considered to have passed the defense if all, or all but one, of the advisory committee members vote that the candidate pass. If the candidate fails the defense, the committee will recommend additional work or other remedial measures to be taken before another defense is scheduled. A student who fails a second time will no longer be eligible to receive a graduate degree from that program. However, the student is still eligible to pursue a graduate degree from any other graduate degree program willing to accept them.

Approval of Defense and Thesis
At the close of a successful defense, the members of the advisory committee will sign the Form 2 to signify that they have examined the thesis closely for both scientific content and format, and determined that it meets the requirements for a master's degree and is worthy of acceptance by the Missouri S&T graduate faculty. If the committee indicates that corrections must be made to the thesis, the candidate must make such corrections and then seek approval of the revised thesis from the committee members and obtain the necessary signatures. The chair of the advisory committee will report the results by submitting the Form 2, first to the department chair and then to the vice chancellor of research and graduate studies. After the Form 2 has been submitted and the office of graduate studies approves the format of the document, the candidate will be given instructions for final submission based on the release information provided on the Form 2.

Final Thesis Release Information
The academic advisor will indicate how the final thesis will be released on the Form 2. There are three options available; immediate release, one-year hold, or indefinite hold. If immediate release or one-year hold is selected, the final thesis must be submitted electronically to the electronic thesis/dissertation (ETD) website. If indefinite hold is selected the final thesis must be printed and submitted to the office of graduate studies. The final thesis must not be submitted until instructions are provided from the office of graduate studies.

Procedures for Earning the Master of Science Degree with Thesis
All master's degree students must have fulfilled all admissions requirements, including English proficiency test scores, if necessary. Students admitted to a master of science degree program and who are writing a thesis must adhere to the following procedures.

1. The student will consult with their academic advisor about course scheduling and registering for classes.
2. During the semester a student will have completed nine hours of graduate credit, the student must formally plan the remainder of their graduate program in consultation with their academic advisor and selected committee members, and submit the Form 1 for approval, first to the department chair and then to the vice chancellor of research and graduate studies. Students who fail to comply with the deadline to submit the Form 1 will have a registration hold placed on their account by the office of graduate studies.
3. The candidate will complete academic requirements included on their plan of study.
4. The candidate will apply for graduation through their Joe'SS account by the deadline posted by the registrar's office.
5. The candidate will arrange a date, time, and location for the defense. The candidate must be enrolled at the time of defense.
6. The candidate will distribute copies of the thesis to all members of the advisory committee at least seven working days before the defense.
7. The candidate must submit a complete copy of the thesis to the office of graduate studies to begin the format checking process.
8. The candidate holds the defense.
9. The chair of the advisory committee will report the results by submitting the Form 2, first to the department chair and then to the vice chancellor of research and graduate studies. Once the format check is complete and the Form 2 has been received, the office of graduate studies will direct the candidate to submit the final copy of the thesis.
10. Upon departmental request, the candidate may present one or more copies of the final thesis to the department.
11. The Board of Curators will, upon the recommendation of the graduate faculty, grant the candidate the master of science degree when all degree requirements are met and all enrollment or examination fees have been paid.

Master of Science Degree without Thesis
The master of science degree without thesis is primarily designed for students who wish to earn an advanced degree without focusing on research. Students who choose this option will have a more classwork-
focused plan of study and will usually earn their degree more quickly than the thesis option. This program provides a more flexible option for students who wish to specialize their knowledge by taking more classes rather than participating in a large-scale research project.

**General Requirements for the Master of Science Degree without Thesis**

The master of science degree without thesis requires a minimum of thirty hours of graduate credit. The plan of study (Form 1/1-A) must include a minimum of twenty-four credit hours of 4000-, 5000-, and 6000-level lecture courses (1000/2000-level courses cannot be included). A minimum of nine credit hours of the required coursework must come from the group of 6000-level lecture courses. Additionally, no credit hours of graduate research may be applied toward the plan of study.

**Comprehensive Examination for the Master of Science Degree without Thesis**

Some departments require candidates to take a comprehensive examination (biological sciences and chemistry). If required, the candidate must successfully complete a final written comprehensive examination that is administered by an examining committee.

For candidates whose department requires a comprehensive examination, a committee will be designated by submitting the Form 1-B, first to the department chair and then to the vice chancellor of research and graduate studies. The committee must consist of at least five members, one of which must be from outside the candidate's major department. The chair and at least half of the committee members must be members of the Missouri S&T graduate faculty. If a committee member is not a member of graduate faculty, a vita verifying equivalent level (or higher) of education must be provided with the Form 1-B.

The comprehensive examination will be given in the candidate's final semester. The candidate must be enrolled at the time of the examination. The candidate will receive a passing grade if all, or all but one, of the members vote to pass. Results of the comprehensive examination must be submitted on the Form 3, first to the department chair and then to the vice chancellor of research and graduate studies. A student who fails the examination twice will no longer be eligible to receive a graduate degree from that program. However, the student is still eligible to pursue a graduate degree from any other graduate degree program willing to accept them.

**Master of Engineering Degree (M.E.)**

The master of engineering degree is designed for full-time students who are able to complete the degree requirements on campus within a single year, as well as for students who have jobs in industry and who thus choose to access this program through distance education. The M.E. degree is practice-oriented, and students are expected to complete a significant project in the course of their studies.

**General Requirements for the Master of Engineering Degree (M.E.)**

The master of engineering degree requires a minimum of thirty hours of graduate credit. The plan of study (Form 1/1-A) must include a minimum of twenty-four credit hours of 4000-, 5000-, 6000- level lecture courses (1000/2000-level courses cannot be included). A minimum of six credit hours of the required coursework must come from the group of 6000-level lecture courses. A minimum of three credit hours of practice-oriented project is required for all M.E. candidates. Additionally, no credit hours of graduate research may be applied toward the plan of study.

**Master of Business Administration Degree (MBA)**

The business and information technology department offers a unique master of business administration degree. The MBA degree integrates core business knowledge and the latest information technology, management, leadership, and entrepreneurship knowledge. In addition to developing influential presentation skills and advanced problem-solving competencies, the MBA education develops advanced strategic thinking skills that are required of the leaders of today and tomorrow.

**General Requirements for the Master of Business Administration Degree (MBA)**

The master of business administration degree requires thirty-six hours of graduate credit (1000/2000-level courses cannot be included). The plan of study (Form 1/1-A) must include a minimum of twenty-one credit hours of core coursework as required by the department. Additionally, no credit hours of graduate research may be applied toward the plan of study.

**Master of Science for Teachers Degree**

The master of science for teachers degree is primarily designed for high school teachers in the sciences and mathematics who want to further their education and earn an advanced degree. The master of science for teachers degree is offered through the departments of chemistry, mathematics and statistics, and physics.

**General Requirements for the Master of Science for Teachers Degree**

The master of science for teachers degree requires a minimum of thirty hours of graduate credit in science and mathematics as required by the department. The plan of study (Form 1/1-A) must include a minimum of twenty-one credit hours of 4000- 5000-, and 6000-level lecture courses (1000/2000-level courses cannot be included). A minimum of thirty credit hours of the required coursework must come from the group of 6000-level lecture courses. Additionally, no credit hours of graduate research may be applied toward the plan of study.

**Master of Arts Degree**

The departments of economics and English and technical communication at Missouri S&T have entered into a cooperative agreement with the corresponding departments at the University of Missouri-St. Louis to offer the master of arts degree in economics and English. This agreement permits students to take up to twelve hours of graduate credit on the Missouri S&T campus. However, students may take only nine credit hours at the 5000-level. Students interested in enrolling in this program are required to fulfill all admissions requirements, including English proficiency test scores, if necessary.

**Procedures for Earning a Master’s Degree without Thesis**

All master’s degree students must have fulfilled all admissions requirements, including English proficiency test scores, if necessary. Students admitted to a master’s degree program who are not writing a thesis must adhere to the following procedures.

1. The student will consult with their academic advisor about course scheduling and registering for classes.
2. During the semester a student will have completed nine hours of graduate credit, the student must formally plan the remainder of their graduate program in consultation with their academic advisor and submit the Form 1 for approval, first to the department chair and then to the vice chancellor of research and graduate studies. Students who fail to comply with the deadline to submit the Form 1 will have a registration hold placed on their account by the office of graduate studies.

3. The candidate will complete academic requirements included on their plan of study.

4. The candidate will apply for graduation through their JoeSS account by the deadline posted by the registrar's office.

5. If the candidate is required to take the comprehensive examination (biological sciences, chemistry, English and technical communication):
   A. The candidate will work with the academic advisor and the department chair to identify potential members of the students examining committee and then submit the Form 1-B to the vice chancellor of research and graduate studies for approval.
   B. The candidate will take the written comprehensive examination.
   C. The chair of the examining committee will report the results by submitting the Form 3, first to the department chair and then to the vice chancellor of research and graduate studies.

6. The Board of Curators will, upon the recommendation of the graduate faculty, grant the candidate the master's degree when all degree requirements are met and all enrollment or examination fees have been paid.