

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 provost of graduate education.

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 provost of graduate education. Within that semester, the office of graduate education 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 provost of graduate education.

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.

- For curriculum changes, the student, academic advisor, and department chair must approve the Form 1-A.
- For committee changes, an academic advisor and/or committee member being removed must acknowledge their removal. The student, academic advisor, current committee members, and department chair must approve the Form 1-A.
 - If converting from thesis to non-thesis, an academic advisor and/or committee member being removed must acknowledge their removal. The student, academic advisor, and department chair must approve the Form 1-A. A contingency procedure that addresses circumstances when a student seeks to change the makeup of their graduate advisory committee, but a member or advisor is either unable or unwilling to provide the required authorization can be found on the Graduate Education webpage.

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 second/subsequent master's degree requires a minimum of twenty-four 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.

A student who has earned a master's degree from Missouri S&T is not eligible to receive a second master's degree in the same degree program.

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 should have the prior written approval of the student's academic advisor, department chair, and the vice provost of graduate education (the application to conduct off-campus research is available on the office of graduate education webpage). 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 on the office of graduate education webpage. 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. If the examination is administered during the intersession, the student must have been enrolled in the immediately preceding semester/session; or, prior to the examination date, they must enroll in one credit hour of Oral Examination, 5040/6040 (charged as an examination only fee).

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 provost of graduate education. After the Form 2 has been submitted and the office of graduate education 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 education. The final thesis must not be submitted until instructions are provided from the office of graduate education.

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 provost of graduate education. 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 education.
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 education 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 provost of graduate education. Once the format check is complete and the Form 2 has been received, the office of graduate education 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 successfully complete a comprehensive examination, which will be administered by an examination committee, typically in their final semester. The candidate must be enrolled at the time of the examination. If the examination is administered during the intersession, the student must have been enrolled in the immediately preceding semester/session; or, prior to the examination date, they must enroll in one credit hour of Oral Examination, 5040/6040 (charged as an examination only fee). The candidate will receive a passing grade if all, or all but one, of the members vote based on the departmental set criteria when the exam is administered.

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 provost of graduate education. The committee must consist of at least three members. 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.

Results of the comprehensive examination must be submitted on the Form 3, first to the department chair and then to the vice provost of graduate education. 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-four credit hours of 4000- 5000-, and 6000-level lecture courses (1000/2000-level courses cannot be included). A minimum of three 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 provost of graduate education. 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 education.
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. If the candidate is required to take the comprehensive examination (biological sciences):
 - 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 provost of graduate education for approval.
 - B. The candidate will take the 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 provost of graduate education.
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.