MASTER OF NATURAL SCIENCE IN MATHEMATICS
DEGREE REQUIREMENTS
SOUTHEAST MISSOURI STATE UNIVERSITY

1. Prerequisites

The student should have a 2.75 gpa or above in the last 30 semester hours of mathematics and science coursework. The student should have an undergraduate mathematics major or have taken the standard calculus sequence (MA 140, MA 145, MA 240), Linear Algebra (MA 345), Modern Algebra (MA 445) and at least 9 more semester hours of upper division mathematics courses.

2. Requirements for the Degree

- The student must take a minimum of 32 semester hours at or above the 500 level. Of these, at least 16 must be at the 600 level.
- MA 560 - Research Methods is a required course of all students.
- Analysis Requirement: At least two courses must be chosen from:
  - MA 546 - Advanced Calculus I*
  - MA 635 - Topology
  - MA 647 - Complex Analysis
  
  *MA 546 is required of all students who did not take it as an undergraduate.
- Algebra/Geometry Requirement:
  - Required Course (pick one):
    - MA 642 - Groups and Fields
    - MA 644 - Rings and Modules
  - In addition, at least one course must be chosen from:
    - MA 632 - Foundations of Geometry
    - MA 633 - Differential Geometry
    - MA 643 - Number Theory
- GR 603 - Seminar in College Teaching is required of all students awarded a Graduate Assistantship.
- Complementary Area - All students must take 6 hours (2 courses) at the 500 level or above from a department outside Mathematics. These courses should be chosen in close consultation with the graduate advisor.
- Thesis/Non-Thesis Options - Each student must either write a thesis or sit for comprehensive exams.
  - Thesis Option - The student must write a thesis involving original mathematical research with an advisor and will enroll in MA 694 - Thesis. The student will give an oral defense of the thesis to a committee consisting of at least the thesis advisor, a second member of the Mathematics faculty and one faculty member from outside the department of Mathematics.
  - Non-Thesis Option - If the student does not write a thesis, the student must write a graduate paper on a topic chosen in consultation with an advisor and give a presentation on it to the department. In addition, the student will sit for a three-hour Comprehensive Examination covering topics from the student’s course work.
- Time Limit: The student must finish all degree requirements within 6 years of the start of the degree.

3. Graduate Program Coordinator

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