Master of School Mathematics Graduate Program

Iowa State University’s Master of School Mathematics (MSM) is designed for current secondary mathematics teachers. The degree program is built on three objectives:

• Enhance your knowledge of algebra, geometry, calculus, statistics and discrete mathematics;

• Provide effective strategies for creating a student-centered classroom emphasizing problem solving; and

• Incorporate use of computing technology in learning and teaching mathematics.

Completion of an MSM program will fulfill the ‘master's degree in an area of endorsement’ requirement listed under the certification rules for a Master Educator License.

Taken on the ISU campus or through blended distance education, the program’s core courses run in a three-year cycle. The Engineering LAS Online Learning platform enables high quality, full-motion, two-way, synchronous, interactive video and audio communication.

Assistantships

Though assistantships are few (typically one or two per Summer), students may apply for a teaching assistantship (TA).

Program of Study

The program is structured to allow all or most course work (a total of 32 credit hours) to be completed in three summers.

• Algorithms in Analysis and their Computer Implementation (3 cr) Summer 2016
• Discrete Mathematics and Applications (4 cr) Summer 2015
• Intermediate Calculus (4 cr) Summer 2016
• Intermediate Geometry (3 cr) Summer 2015
• Seminar in Mathematics Education, Summer 2015, 2016 and 2017
• Statistical Methods for Mathematics Teachers (4 cr) Summer 2017
• Electives (6 cr)
• Creative Component (3 cr) A formal paper that demonstrates the investigation of a mathematical topic which is new to the student. The paper will be built on the mathematical concepts developed in the program.

Students must also complete an oral examination following the completion of coursework and creative component.

Faculty members

The Mathematics Department currently has eight active faculty members who teach and advise students in the MSM program. These faculty members have a variety of backgrounds, whether pure or applied mathematics, or mathematics education. Two additional faculty members in the ISU Curriculum and Instruction Department emphasize mathematics education and serve as a resource for the MSM program.
Our students

The graduate students in the Master of School Mathematics Program most often teach at Iowa high schools, though some teach in schools in surrounding states.

Opportunities in School Mathematics

Graduates of the MSM program enjoy expanding their teaching careers. One of our recent graduates has received a presidential award for excellence in mathematics and science teaching.

Our graduates typically either continue their high school career as a Master Educator, move to Community College teaching, and some even decide to pursue a doctorate in Mathematics or Mathematics Education. We encourage our graduates to publish in journals like Mathematics Teacher, and many of them have successfully done so.

Admission requirements

- A baccalaureate degree, in upper one-half of graduation class from a regionally accredited U.S. institution or recognized foreign institution
- Certification to teach mathematics in grades 9-12 and have at least two years of teaching experience.

These requirements are intended to restrict admission to in-service school mathematics teachers for whom the MSM program was intended. However, persons whose backgrounds in mathematics or present employment only partially qualifies them for admission may petition for special consideration.

Application materials

- Application form
- Application fee (ISU graduates do not pay the application fee but need to submit the paper materials)
- Three letters of recommendation from departmental chairs or supervisors giving reason to expect success in the MSM program
- Official transcripts from all universities attended
- Statement of Purpose
- Resume

For more information

www.math.iastate.edu/MSM/MSMhome.html

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