

## Admission Requirements

- 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 with 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 background in mathematics or present employment only partially qualifies them for admission may petition for special consideration.*

## Application Materials

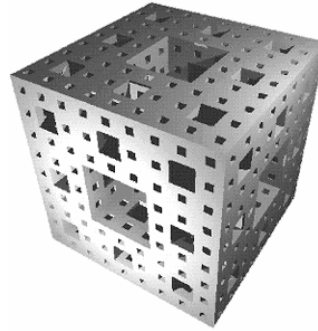
- Application Form
- Application Fee (ISU graduates do not pay the application fee but need to submit paper materials.)
- Three letters of recommendation from peers or supervisors giving reason to expect success in the MSM program.
- Official transcripts from all universities attended.
- Statement of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

## To apply

1. Submit the online application found at : <http://www.applyweb.com/aw?isu> and
2. Mail remaining application materials to:  
*Melanie Erickson, Graduate Secretary  
Department of Mathematics  
396E Carver Hall  
Ames, IA 50011-2064*

OR

Submit ALL application materials (including application form and fee) to graduate secretary at the above address. Paper application can be found at [http://www.admissions.iastate.edu/apply/pdf/us\\_gr\\_app.pdf](http://www.admissions.iastate.edu/apply/pdf/us_gr_app.pdf).



## Our Location

Iowa State University is situated in Ames, a town of approximately 50,000, which is located 35 miles north of the state capitol of Des Moines. Ames is a cosmopolitan small town with a diverse population, high quality of life, and rich cultural offerings. The *New Rating Guide to Life in America's Small Cities* recently ranked Ames second best out of 190 small cities in America. For more information, visit <http://www.ames.ia.us>.

## Visiting ISU

If you would like to visit Iowa State University and the Mathematics Department, please contact:  
*Mathematics Graduate Secretary*  
[msm@math.iastate.edu](mailto:msm@math.iastate.edu)  
515-294-0393

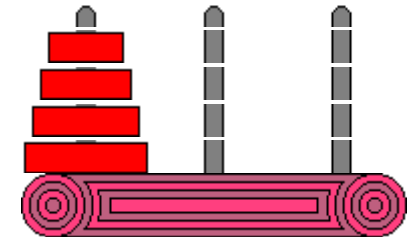
## For more information

Visit our website at <http://www.math.iastate.edu/msm/>  
Contact:  
*Dr. Heather A. Thompson  
Director of MSM Program  
Department of Mathematics  
396F Carver Hall  
Ames, IA 50011-2064  
515-294-8465  
[hathomps@iastate.edu](mailto:hathomps@iastate.edu)*

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# Master of School Mathematics Graduate Program

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**Iowa State University**  
**Department of Mathematics**  
Ames, Iowa

## Master of School Mathematics

At Iowa State University the MSM program is designed for current secondary teachers of mathematics. This program is intended to:

- enhance teachers' knowledge of geometry, calculus, statistics and discrete mathematics;
- promote effective strategies for creating a student-centered classroom emphasizing problem solving;
- develop teachers' abilities to use computing technology in learning and teaching mathematics.

The courses offered during the summer accommodate teachers' schedules.

Taken either on the ISU campus or through the Iowa Communications Network (ICN), the program's core courses run in a three-year cycle. Owned and operated by the State of Iowa, the ICN is a fiber-optics network connecting learning centers across the state enabling high quality, full-motion, two-way, interactive video and communication.



## Program of Study

The MSM may be completed through full-time or summer-only study. The program has been structured so that all or most course work can be completed in three summers. Some full-time students have completed the program in less than two years.

Coursework in the MSM program requires completion of 33 credits including:

- Algorithms in Analysis and their Computer Implementation (3 credits) *Summer 2007*
- Discrete Mathematics and Applications (4 credits) *Summer 2009*
- Intermediate Calculus (4 credits) *Summer 2007*
- Intermediate Geometry (3 credits) *Summer 2009*
- Seminar in Mathematics Education (3 credits) *Summer 2008*
- Statistical Methods for Research (4 credits) *Summer 2008*
- Electives (9-10 credits)
- Creative Component (2-4 credits)



The statistics course offered Summer 2008 will have an emphasis on preparing teachers to teach AP Statistics.

The creative component is a formal paper which communicates a mathematical topic which is new to the student. The paper theoretically should build on the concepts obtained in the program and implement the topic in the secondary classroom.

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

## Assistantships

Full-time or summer-only students may apply for a limited number of teaching assistantships (TA). For full-time students, the teaching assistant would teach recitations or an individual class of algebra, calculus, or trigonometry. For summer-only students, the teaching assistant would teach a summer class of algebra, trigonometry, or calculus, conduct nightly study sessions for undergraduate summer programs, or grade papers for other instructors.

Stipends may range between \$2,000 and \$3,000 for summer support, and up to \$16,000 for nine months.

## Faculty & Graduate Students

The Mathematics Department currently has five 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. Three additional faculty members in the ISU Curriculum and Instruction Department emphasize mathematics education and serve as a resource for the MSM program.

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 and take classes in Iowa during the summer.

## Opportunities in School Mathematics

Graduates of the MSM program have proven to be successful in their teaching careers. Some recent graduates have been successful in:

- Continuing to teach mathematics at the high school level.
- Teaching mathematics at a community college.
- Pursuing doctorates in mathematics education.
- Receiving a presidential award for excellence in mathematics and science teaching.
- Publishing in [The Mathematics Teacher](#).