

MST in Mathematics

Admission Requirements

Transcripts of all undergraduate and any graduate work must be submitted. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

- **Baccalaureate Field (Elementary School Option)** Mathematics or a related field.
- **Baccalaureate Field (Secondary School Option)** Mathematics or a related field that includes three semesters of calculus plus two courses from the following:
 - Linear Algebra (MATH 310 or MATH 320, or equivalent)
 - Abstract Algebra (MATH 330 or equivalent) or Number Theory (MATH 436 or equivalent)
 - Analysis I (MATH 313 or MTHT 430, or equivalent)
 - Introduction to Advanced Mathematics (MATH 215 or equivalent)
- **Grade Point Average** At least 3.00/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate study, and an average of 3.00 in all mathematics courses beyond calculus.
- **Minimum English Competency Test Score**
 - **TOEFL** 100, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21 (iBT Test); 60, with subscores of Reading 19, Listening 17, Writing 21 (revised Paper-Delivered Test), **OR**,
 - **IELTS** 7.0, with subscores of 7.0 for all four subscores, **OR**,
 - **PTE-Academic** 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.
- **Letters of Recommendation** Three required from persons familiar with the applicant's academic work.
- **Personal Statement** Required.
- **Other Requirements** Applicants for the Elementary School Option must hold a valid K–8 Illinois Teaching License or the equivalent.

Degree Requirements

Elementary School Option

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- **Minimum Semester Hours** 36 hours. At least 12 hours of course work must be at the 500 level, excluding independent study.
- **Course Work**

Code	Title	Hours
Required Courses:		
MTHT 450	Concepts and Methods in Elementary and Middle School Mathematics I	
MTHT 465	Teaching Algebra for Understanding	
MTHT 466	Introduction to Calculus and the Graphing Calculator	
MTHT 467	Introduction to Number Theory with Application	

MTHT 468	Geometry with Applications for Middle Grade Teachers
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Electives must be approved by the Office of Mathematics Education, and other courses may be substituted with the permission of the Office of Mathematics Education.

Secondary School Option

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- **Minimum Semester Hours:** 32 hours. At least 12 hours of course work must be at the 500 level, excluding independent study.
- **Course Work**

Code	Title	Hours
Required Courses		
MTHT 411	Advanced Euclidean Geometry	
MTHT 435	Abstract Algebra	
or MATH 435	Foundations of Number Theory	
MATH 417	Complex Analysis with Applications	
STAT 401	Introduction to Probability	
The remaining courses must be approved by the Office of Mathematics Education, and other courses may be substituted with the permission of the Office of Mathematics Education.		

Other Requirements

- **Comprehensive Examination** None.
- **Thesis, Project, or Course-Work-Only Options** Course work only. No other options are available.
- **Additional Requirements for Secondary Teacher Licensure** Students who wish to seek teacher licensure must take additional courses in the College of Education and complete student teaching to be eligible for state licensure. Such students are also more restricted in their choices of courses. Courses should be selected in consultation with an advisor. Contact the department for the current requirements. At the time of this writing, in addition to the MST requirements, students seeking licensure must complete:

Code	Title	Hours
Required Courses for Secondary Teacher Licensure		
MTHT 400	Methods of Teaching Secondary Mathematics I	
MTHT 401	Methods of Teaching Secondary Mathematics II	
MTHT 438 & MTHT 439	Educational Practice with Seminar I and Educational Practice with Seminar II	
Education Courses		
ED 402	Philosophy of Education and Urban School Policy	
or ED 403	Policy Issues in the History of American Education	
ED 445	Adolescence and the Schools	
or ED 421	Advanced Educational Psychology	
CI 504	Secondary Literacy	

SPED 410 Exceptional Learners

ED 432 Instruction and Assessment in the
Urban Secondary Classroom

- The teaching license is not automatically awarded upon successful completion of degree and licensure requirements. For more information on application procedures for the teaching license, contact the Council on Teacher Education.