

# MATHEMATICS, MS

for the Master of Science in Mathematics

The MS in Mathematics program allows students a wide range of course choices and can offer good preparation either for a job in industry or for pursuit of a doctorate in mathematics at another university. It is rare, though not impossible, for students to enter the PhD program at the University of Illinois after finishing the MS in Mathematics. The degree requires 32 credit hours and can normally be completed in 18 months. A master's thesis is optional. Applications are accepted for Fall semester each year. Financial aid is generally not available.

for the Master of Science in Mathematics

For additional details and requirements refer to the department's Guide to Graduate Studies (<https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf>) and the Graduate College Handbook (<http://www.grad.illinois.edu/gradhandbook/>).

## Thesis Option

Code	Title	Hours
Select one of the following:		3-4
MATH 448	Complex Variables	
MATH 540	Real Analysis	
MATH 542	Complex Variables I	
Select one of the following:		3-4
MATH 418	Intro to Abstract Algebra II	
MATH 500	Abstract Algebra I	
MATH 501	Abstract Algebra II	
MATH 599	Thesis Research (min/max applied toward degree)	4
Total Hours Required:		32

## Other Requirements

Requirement	Description
Other requirements may overlap	
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum Hours Required Within the 24 Unit:	
Minimum 500-level Hours Required	12 (in MATH)
Overall:	
Minimum GPA:	3.0

## Non-Thesis Option

Code	Title	Hours
Select one of the following:		3-4
MATH 448	Complex Variables	
MATH 540	Real Analysis	
MATH 542	Complex Variables I	
Select one of the following:		3-4

MATH 418	Intro to Abstract Algebra II
MATH 500	Abstract Algebra I
MATH 501	Abstract Algebra II

Total Hours Required: 32

## Other Requirements

Requirement	Description
Other requirements may overlap	
MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.	
Minimum Hours Required Within the 24 Unit:	
Minimum 500-level Hours Required	12 (in MATH)
Overall:	
Minimum GPA:	3.0

for the Master of Science in Mathematics

1. Students will have a strong understanding of abstract algebra.
2. Students will have a strong understanding of real analysis.
3. Students will gain the ability to engage with theoretical mathematical thinking at the graduate level.
4. Students will gain experience in original research in mathematics, if desired. This goal applies to students on the thesis track of this program.

for the Master of Science in Mathematics

## Graduate Degree Programs in Mathematics

- Actuarial Science, MS (<http://catalog.illinois.edu/graduate/las/actuarial-science-ms/>)
- Applied Mathematics, MS (<http://catalog.illinois.edu/graduate/las/applied-mathematics-ms/>)
- Mathematics, MS (p. 1)
- Predictive Analytics and Risk Management, MS (<http://catalog.illinois.edu/graduate/las/predictive-analytics-risk-management-ms/>)
- Enterprise Risk Management (<http://catalog.illinois.edu/graduate/las/predictive-analytics-risk-management-ms/enterprise-risk-management/>)
- Financial and Insurance Analytics
- Mathematics, PhD (<http://catalog.illinois.edu/graduate/las/mathematics-phd/>)
- optional concentrations:
  - Actuarial Science & Risk Analytics (<http://catalog.illinois.edu/graduate/las/mathematics-phd/actuarial-science-risk-analytics/>)
  - Computational Science and Engineering (<http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/>)
- Teaching of Mathematics, MS (<http://catalog.illinois.edu/graduate/las/teaching-mathematics-ms/>)

for the Master of Science in Mathematics

**Mathematics Department**

Department Chair: Vera Hur

Director of Graduate Studies: Yuliy Baryshnikov

Mathematics Department website (<http://www.math.illinois.edu/>)

Mathematics Department faculty (<https://math.illinois.edu/directory/faculty-by-type/>)

Mathematics faculty research (<https://math.illinois.edu/research/faculty-research/>)

273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801

(217) 333-5749

Mathematics email ([math-grad@illinois.edu](mailto:math-grad@illinois.edu))

**College of Liberal Arts & Sciences**

College of Liberal Arts & Sciences website (<https://las.illinois.edu/>)

**Admissions**

Mathematics Admissions & Requirements (<https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#MS-Math>)

Graduate College Admissions & Requirements (<https://grad.illinois.edu/admissions/apply/>)