

# MATHEMATICS, PHD

## ADMISSIONS

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Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. **Applicants must meet the minimum requirements (<https://grad.wisc.edu/apply/requirements/>) of the Graduate School as well as the program(s).** Once you have researched the graduate program(s) you are interested in, apply online (<https://grad.wisc.edu/apply/>).

Requirements	Detail
Fall Deadline	December 15
Spring Deadline	This program does not admit in the spring.
Summer Deadline	This program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required but may be considered if available.
English Proficiency Test	Refer to the Graduate School: Minimum Requirements for Admission policy: <a href="https://policy.wisc.edu/library/UW-1241">https://policy.wisc.edu/library/UW-1241</a> ( <a href="https://policy.wisc.edu/library/UW-1241/">https://policy.wisc.edu/library/UW-1241/</a> ).
Other Test(s) (e.g., GMAT, MCAT)	The GRE subject test in Mathematics is optional but may be considered if available.
Letters of Recommendation Required	3

Admission is competitive. Applicants to the PhD program are automatically considered for financial support.

### APPLICATION CHECKLIST

A complete application includes the following items:

1. Statement of purpose: Your essay should be a concise description of your reasons for choosing to study this field at the University of Wisconsin-Madison (not to exceed two pages). Please include your research interests and career goals as well as a description of your preparation for graduate study including relevant coursework, related employment, research experience, publications, presentations, awards, and honors. (samples (<https://math.wisc.edu/graduate/prospective-phd/additional-application-information/>))
2. Supplementary application:
  - a. Coursework (different from transcript): In a list or table format, state all advanced mathematics courses you have completed, are currently enrolled in, or intend to take. For each course, give the name of the school where you took it, the course number, the title, description, books used, and the grade you received (for completed courses). If you have more than 20 courses, please include ONLY the most advanced courses. (sample (<https://math.wisc.edu/graduate/prospective-phd/additional-application-information/>))

[math.wisc.edu/graduate/prospective-phd/additional-application-information/](https://math.wisc.edu/graduate/prospective-phd/additional-application-information/))

3. CV/Resume: Your CV/resume should include your educational background as well as teaching and research experience, publications, and accomplishments. (sample (<https://math.wisc.edu/graduate/prospective-phd/additional-application-information/>))
4. Unofficial transcripts: Unofficial transcripts from all previous postsecondary studies are required. International academic records must be submitted in the original language and accompanied by an English translation. If an applicant is recommended for admission, the Graduate School will ask applicants to request official transcripts sent to the Graduate School from the undergraduate institution.
5. Letters of recommendation: Three (3) letters of recommendation that address the question of mathematical promise. These letters should be from mathematics faculty, or other faculty familiar with the demands of graduate work in mathematics.

### BACKGROUND EDUCATION

Successful applicants have a bachelor's degree in mathematics/applied mathematics/statistics.

#### Preparatory Coursework

Code	Title	Credits
<b>Analysis I/II</b> <sup>1</sup>		
Examples of courses (or equivalent):		
MATH 521	Analysis I	3
MATH 522	Analysis II	3
<b>Algebra I/II</b> <sup>1</sup>		
Examples of courses (or equivalent):		
MATH 541	Modern Algebra	3
MATH 542	Modern Algebra	3
<b>Linear Algebra</b>		
Example of course (or equivalent):		
MATH 341	Linear Algebra	3
<b>Electives</b>		

Four electives among advanced undergrad or grad math courses. Incoming students usually, but not always, have some exposure to graduate level mathematics through graduate coursework, independent study, or research experience. This background often exceeds the minimum requirements for a math major.

#### Faculty Advisors

You do not need an advisor prior to applying. Incoming students are assigned academic advisors at the beginning of their programs. PhD students have until the end of their 6th semester to secure a dissertation advisor.

- <sup>1</sup> Candidates with interest in Applied Math may have a different mathematics background, typically including coursework in ordinary and partial differential equations, and computational science with programming experience in Python, Matlab, or similar language. That coursework should be at a commensurately advanced undergraduate level.