MATHEMATICS, PH.D.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students are able to complete a program with minimal disruptions to careers and other commitments.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirements	Detail
Minimum Credit Requirement	51 credits
Minimum Residence Credit Requirement	32 credits
Minimum Graduate Coursework Requirement	For students in the Ph.D. program the coursework in the mathematics department is expected to consist only of graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle/)).
Overall Graduate GPA Requirement	3.00 GPA required.
Other Grade Requirements	No additional grade requirements.
Assessments and Examinations	Students are required to pass at least two qualifying exams. At least one qualifying exam must be passed by the beginning of the fourth semester (the spring semester of the second year). Both qualifying exams must be passed by the beginning of their sixth semester (the spring semester of the third year). Students must pass a preliminary exam (specialty exam) by the end of the eighth semester (end of fourth year). Students must satisfy all the requirements for dissertator status by the end of the eighth semester (end of fourth year).
Language Requirements	No language requirements.
Doctoral Minor/ Breadth Requirements	All doctoral students are required to complete a 12-credit minor.

REQUIRED COURSES

Take a total of 51 graduate credits, or generally 18 courses. This includes courses in math and in a minor. In the Ph.D. program, math courses numbered above 700 are for graduate credit. Math courses below 700 must be approved by the academic advisor.

There are five general and overlapping areas of specialization[1] within the department:

- Algebra, Algebraic Geometry, Combinatorics and Number theory
- Analysis, Differential Equations and Probability
- Applied and Computational Mathematics
- Logic
- Geometry and Topology

There is also a specialty in Mathematics Education[1]. The course requirement is the same as for the other specialties except that the required 51 credits should include 18 credits in courses that relate to mathematics education, and at least one of the courses must be on research techniques in education. The 18 credits may come (wholly or in part) from courses included in the minor.

1 These tracks are internal to the program and represent different pathways a student can follow to earn this degree. Track names do not appear in the Graduate School admissions application, and they will not appear on the transcript.