

# MS in Applied Mathematics

## Degree Requirements

Designed to give students training in those areas of mathematics used frequently in applications.

A candidate must satisfactorily complete 30 hours of approved course work, at least 15 hours of which must be in 8000-level courses.

Required		
MATH 8420	Theory of Functions of Real Variables I	3
MATH 8440	Advanced Ordinary Differential Equations I	3
MATH 8190	Masters Project in Mathematics *	3
or		
MATH 8090	Master's Thesis Research in Mathematics *	
Suggested		
MATH 8445	Partial Differential Equations I	3
MATH 8480	Advanced Probability	3

At least three hours of the 30 hours must be taken outside the department. Additional requirements, (some of which may be satisfied by work done as an undergraduate), include the completion of one year of advanced calculus and at least one approved course in each of the areas of linear algebra, numerical analysis and mathematical statistics or probability.

Students may not list the courses:		
MATH 7100	Differential Equations	3
MATH 7110	Advanced Calculus with Applications	3
MATH 7140	Matrix Theory	3
MATH 7150	History of Mathematics	3

\* The successful completion of a Master's Project (MATH 8190) or Master's Thesis (MATH 8090) must be certified by a Master's Committee consisting of three members of the Mathematics regular faculty.

## Plan of Study

First Year			
Fall	CR	Spring	CR
MATH 7700		3 MATH 7900	3
7000-level course		3 MATH 7920	3
7000-level course		3 MATH 7940	3
		9	9
Second Year			
Fall	CR	Spring	CR
MATH 8420		3 8000 Class	
MATH 8440		3 8000 Class	
8000 Class		Masters Project	
		6	0
Total Credits: 24			

## Admission Criteria

**Notes:** Applicants for any graduate degree in mathematics should submit an application for graduate study. Admission to the graduate program does NOT guarantee admission to the Ph.D. program. International

Applicants applying from outside North America who seek financial support from the Department will only be considered for the PhD program.

Fall deadline: January 15

- While a bachelor's degree from an accredited institution is required, the undergraduate major need not be mathematics as long as applicants have had sufficient mathematics training to qualify for 8000-level courses during the first three semesters of graduate work.
- Minimum TOEFL scores:

Internet-based test (iBT)	Paper-based test (PBT)
61 Effective July 1, 2015 must have score of 80	500 Effective July 1, 2015 must have score of 550

**Important Notes:** International applicants seeking departmental support are required to have a minimum TOEFL score of 85 (Internet-based test) or equivalent. An ibtTOEFL Speaking subscore of 22 or higher is preferred.

- Minimum total academic IELTS score is 5.5

## Required Application Materials

- 3 or more letters of recommendation from your professors or persons who assess in detail your academic performance and potential.
- Transcripts
- Personal Statement
- TOEFL or IELTS (International students only)

Note: The application is submitted through the Graduate School ApplyYourself (<https://applygrad.missouri.edu/apply/>) system.

## Completing the ApplyYourself Application:

This section consists of four subsections.

- Personal Information: Complete all information as requested.
- Application Information: Applications are considered only starting Fall Semester, and only for Full-time study. Select a degree from the Graduate Degrees offered by the MU Mathematics Department.
- Indicate your selection for the **Applied master of Mathematics Master of Arts (MS)**
  - Admissions Category: Graduate Degree Sought at MU: Master's
  - Graduate Program to which you are seeking admissions: Applied Mathematics Master of Science (MS)
- Educational History: Complete all information as requested.
- Test Information:
  - MU's Institutional Code for the TOEFL is: 6875.

## Supplemental Information:

- (required) Upload your Personal Statement, Statement of Goals or Statement of Purpose.
- Please indicate the specific degree for which you are applying, any additional degrees for which you may later apply, and explain your reasons for choosing to pursue these degrees at the University of Missouri. Note that admissions criteria for the PhD are more stringent than for the Master's. MU PhD students can later add a Master's degree to their program of study without requiring departmental approval. MU Master's students who wish to later add the PhD to their program of study require departmental evaluation and approval.
- (optional) Upload your résumé or curriculum vita.

- (optional) Upload your writing sample.
- You may submit samples of your mathematical writings, publications, or pre-prints. Please limit to 10 pages.
- (optional) Upload any other supporting documents
- Unofficial copies of transcripts uploaded by applicant can be used for initial evaluation- official transcripts sent directly to the Graduate Admissions Office will still be required to finalize admission

**RECOMMENDATIONS:** The ApplyYourself (<https://applygrad.missouri.edu/apply/>) system will let you request confidential online recommendation letters from your recommendation providers. You need to provide the names and email addresses of recommendation providers who have agreed in advance to write letters for you. The Mathematics Department application requires at least three recommendation letters from your professors (or persons who assess in detail your academic performance and potential).

### Admission Contact Information

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