

University of Missouri-St Louis
Graduate Program Profile
Doctor of Philosophy (Ph.D.) in Applied Mathematics

Degree Program

Coursework: A minimum of 60 credit hours

Mathematics Option: at least 33 hours must be in courses numbered 5000 or above.

Computer Science Option: at least 45 hours must be in courses numbered 5000 or above.

Qualifying Examination:

Step 1. Take a written examination, normally within the first 12 credit hours of study in the Ph.D. program.

Mathematics Option: Topics from advanced calculus, complex variables and linear algebra (Math 4100, 4160, 4450).

Computer Science Option: Topics from the theory of programming languages, operating systems, analysis of algorithms, and computer systems (CS 4250, 4760, 5130, 5700).

Step 2. After passing Step 1, select one of the following (normally within the first 24 hours of study of the program):

1. Pass a written examination in an approved area of the student's interest.
2. Write a survey paper in a specialized area under the direction of a member of the graduate faculty and defend it in an oral examination.

Dissertation All students must defend orally a written dissertation proposal to their dissertation committee. A dissertation embodying the results of original research must be accepted by the Department of Mathematics and Computer Science and the Graduate School.

Emphasis Areas

Computer Science, Mathematics

Program Website

<http://www.cs.umsl.edu/Degrees/PhD-math.html>

Application Requirements

1. Application

<http://www.umsl.edu/divisions/graduate/prospective/applying.html>

2. Three letters of recommendation

Letters of recommendations from persons qualified to evaluate the student's academic ability are required.

3. Official transcripts from all universities attended

Applicants must have completed at least a baccalaureate degree before beginning the program.

4. Entrance examinations

a. Graduate Record Examination (GRE) (see <http://www.gre.org/ttindex.html>).

b. International students are required to document English proficiency (<http://www.umsl.edu/divisions/graduate/prospective/international.html>).

5. Grade Point Average

Minimum of 3.0 on 4.0 scale.

Application Deadlines

The deadline for receipt of all admission materials is July 1 of each year (February 1 for funding).

Application Fee

\$35 (\$40 for international students)

Assistantships

Assistantships are available for outstanding applicants. Please follow instructions to apply at

<http://www.cs.umsl.edu/Degrees/AdvDegrees.html#assistantship>

Graduate Program Director

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