

# MASTER OF SCIENCE IN THE FIELD OF APPLIED MATHEMATICS (STEM)

The master of science in applied mathematics program pairs a mathematical background with an additional focus area of the student's choice. The interdisciplinary curriculum prepares students for careers and further study in high-performance computing, statistics, computer science, business, and more.

Unlike the MA curriculum, MS courses are divided between mathematics and a chosen focus area. MS in mathematics students do not take qualifying examinations.

This is a STEM designated program.

Visit the program website (<https://math.columbian.gwu.edu/ms-applied-mathematics/>) for additional information.

## ADMISSIONS

Visit the Columbian College of Arts and Sciences website for application requirements (<https://columbian.gwu.edu/application-requirements/>).

Supporting documents not submitted online should be mailed to:

Columbian College of Arts and Sciences, Office of Graduate Studies  
The George Washington University  
801 22nd Street NW, Phillips Hall 107  
Washington DC 20052

For additional information about the admissions process visit the Columbian College of Arts and Sciences Frequently Asked Questions (<https://columbian.gwu.edu/graduate-admissions-faq/>) page.

Contact for questions:

askccas@gwu.edu  
202-994-6210 (phone)  
Hours: 9:00 am to 5:00 pm, Monday through Friday

## REQUIREMENTS

The following requirements must be fulfilled:

The general requirements stated under Columbian College of Arts and Sciences, Graduate Programs (<https://bulletin.gwu.edu/arts-sciences/#degreeregulationstext>).

30 credits in approved courses divided between mathematics and one of the following areas of application: computer science, economics, engineering (civil, electrical, mechanical, or systems), operations research, physics, or statistics. No more than 12 credits may be in non-MATH courses. Students must petition and obtain the approval of the graduate committee in order to register for courses outside the department.

Students who wish to register for MATH 6995 Reading and Research must petition and obtain the approval of the graduate committee.

Up to 6 credits in courses taken at other institutions of [the Consortium of Universities of the Washington Metropolitan Area](#) may count toward degree requirements. Students wishing to take such courses must petition and obtain the approval of the graduate committee.

Subject to the approval of the graduate committee (requested via petition) and the agreement of the instructor, mathematics graduate students may take up to 6 credits in the undergraduate courses listed below for graduate credit. Appropriate additional work must be assigned for students to receive graduate credit in an undergraduate course.

Code	Title	Credits
MATH 3613	Introduction to Combinatorics	
MATH 3632	Introduction to Graph Theory	
MATH 3710	Introduction to Mathematical Logic	
MATH 3720	Axiomatic Set Theory	
MATH 3730	Computability Theory	
MATH 3740	Computational Complexity	
MATH 4239	Real Analysis I	
MATH 4240	Real Analysis II	
MATH 4981	Seminar: Topics in Mathematics	