MASTER OF SCIENCE IN MATHEMATICS

The Master of Science program in mathematics welcomes students of ability and with a strong undergraduate background in mathematics or a related field, such as computer science, engineering, physics, finance, economics, or certain social sciences.

Requirements

To earn a Master of Science degree in Mathematics, students complete the following in consultation with a faculty advisor:

Code	Title	Credits
Core Courses		
MATH 5435	Linear Algebra [1]	3
MATH 5471	Real Analysis [1]	3
Select two of the following Proof-Intensive courses:		6
MATH 5436	Abstract Algebra	
MATH 5452	Statistics Theory	
MATH 5472	Complex Analysis	
MATH 6535	Advanced Abstract Algebra	
MATH 6537	Number Theory	
MATH 6583	Geometry	
MATH 6585	Topology	
Elective Courses		
Select six courses from the following:		18
MATH 5401	Introduction to Applied Mathematics	
MATH 5417	Applied Statistics I	
MATH 5418	Applied Statistics II	
MATH 5436	Abstract Algebra	
MATH 5451	Probability Theory	
MATH 5452	Statistics Theory	
MATH 5472	Complex Analysis	
MATH 6510	Foundations and Set Theory	
MATH 6531	Dynamical Systems	
MATH 6532	Partial Differential Equations	
MATH 6535	Advanced Abstract Algebra	
MATH 6537	Number Theory	
MATH 6550	Classical Financial Mathematics	
MATH 6565	Use of Technology in the Classroom	
MATH 6577	Numerical Analysis	
MATH 6578	Math of Financial Derivatives	
MATH 6583	Geometry	
MATH 6585	Topology	
Capstone		
MATH 6999	Capstone Project (Pass/Fail) [2]	0
Total Credits		**30**

[1] One or both of these courses may be substituted with another proof-intensive course with permission of Program Director.

[2] Each student should complete, generally in their final semesters, a capstone consisting of a project or an oral or written exposition of mathematics, in consultation with a faculty advisor. Capstones are generally associated with a course the student is taking, though it may be associated with an independent study. The faculty advisor may or may not be the instructor of the associated course, and each student, with the help of their advisor, should develop a proposal in advance for their capstone.