

Master of Science in Mathematics

DEGREE REQUIREMENTS

Teaching Option

A candidate for the M.S. degree with Concentration in Teaching must complete a minimum of 36 semester hours of graduate work approved by the Department graduate committee.

These include:

Required Courses (24 semester hours)

Electives: (12 semester hours)

Comprehensive Examination

Each candidate for the Concentration in Teaching must perform satisfactorily on a final comprehensive examination.

Courses	Credits	Semester Planned
Required Mathematics Education Courses	9	
MATH 6713 Strategies for Teaching Mathematics	3	
MATH 6723 Assessment and Classroom Management in Mathematics Education	3	
MATH 6733 Research in Mathematics Education	3	
Required Mathematics Courses	15	
MATH 6743 Advanced Perspectives on Secondary Mathematics	3	
MATH 6253 Mathematical Analysis I	3	
MATH 6263 Mathematical Analysis II	3	
MATH 6233 Geometry	3	
MATH 6513 Applied Linear Algebra	3	
Electives (Choose 4)	12	
MATH 6043 Theory of Numbers MATH 6203 Applied Probability MATH 6213 Statistical Methods MATH 6413 Advanced Modern Algebra I MATH 6423 Advanced Modern Algebra II MATH 6473 Combinatorial Analysis MATH 6483 Theory of Graphs		
Total Program	36	

Applied Mathematics Option

A candidate for the M.S. degree with Concentration in Applied Mathematics must complete a minimum of 36 semester hours of graduate work approved by the Department graduate committee. These include:

Required Courses (24 semester hours)

Electives: (9 semester hours)

Research Project (3)

All candidates for the Concentration in Applied Mathematics are required to complete an independent project under the supervision of a member of the graduate faculty. The project could involve a specific application to a concrete problem of techniques identified in the literature or studied in other courses.

Comprehensive Examination

Each candidate for the Concentration in Applied Mathematics must perform satisfactorily on a final comprehensive examination.

Courses	Credits	Semester Planned
Required Mathematics Courses	27	
MATH 6253 Mathematical Analysis I	3	
MATH 6263 Mathematical Analysis II	3	
MATH 6203 Applied Probability	3	
MATH 6213 Statistical Methods	3	
MATH 6513 Applied Linear Algebra	3	
MATH 6503 Numerical Methods in Applied Mathematics	3	
MATH 6363 Theory of Partial Differential Equations	3	
MATH 6003 Dynamical Systems and Applications	3	
MATH 6733 Research Project	3	
Electives (Choose one sequence and one additional course)	9	
MATH 6103 Discrete Optimization MATH 6303 Introduction to Mathematical Control Theory MATH 6903 Bio-Mathematics Sequence I: MATH 6473 Combinatorial Analysis and MATH 6483 Theory of Graphs Sequence II: MATH 6403 Signal processing and MATH 6413 Inverse Problems		
Total Program	36	