

Master of Science in Mathematics DEGREE REQUIREMENTS

Applied Mathematics Option

A candidate for the M.S. Degree with Concentration in Applied Mathematics must complete a minimum of 30 semester hours of graduate work approved by the department graduate committee. These include:

Required Courses (9 semester hours)

Electives: (21 semester hours)

Comprehensive Examination

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

Courses	Credits
Required Mathematics Courses	9
MATH 6253 Mathematical Analysis I	3
MATH 6263 Mathematical Analysis II	3
MATH 6363 Theory of Partial Differential Equations	3
Electives (Choose 7)	21
MATH 6003 Dynamical Systems and Applications	3
MATH 6043 Topics in Number Theory	3
MATH 6103 Discrete Optimization	3
MATH 6213 Statistical Methods	3
MATH 6233 Geometry	3
MATH 6303 Introduction to Mathematical Control Theory	3
MATH 6403 Signal Processing	3
MATH 6413 Advanced Modern Algebra I	3
MATH 6423 Advanced Modern Algebra II	3
MATH 6473 Combinatorial Analysis	3
MATH 6483 Theory of Graph	3
MATH 6503 Numerical Methods in Applied Mathematics	3
MATH 6513 Applied Linear Algebra	3
MATH 6613 Inverse Problems	3
MATH 6743 Advanced Perspectives on Secondary Mathematics	3
MATH 6903 BioMathematics	3
MATH 6982 Directed Readings	3
MATH 6983 Graduate Research Project	3
Total Program	30

Comprehensive Examination

As a requirement of the graduate program of MS in Mathematics at UWG, each candidate for any concentration in the program must perform satisfactorily on a final comprehensive examination. The Math Department at UWG will administer such final comprehensive examinations based on the registration of graduation in each semester. Each candidate who has registered for graduation with the Graduate School must contact the Director of Graduate Studies of the Math Department at least three months before the end of the semester for information on his/her examination.

- A final comprehensive examination will cover the contents of at least three courses that represent the breadth of the concentration of the candidate and that include one required course, one analysis, and one algebra or discrete mathematics.
- The Director of Graduate Studies will arrange with the candidate to determine the courses to be covered, with colleagues teaching these courses to have the problems for the examination.
- The examination will be for three hours and arranged to be administered during the examination time period of the semester at UWG.
- The exact date and location of the examination must be announced to the candidate at least one month ahead.
- In order to pass, a student has to score 70% or better on all subjects.
- A candidate, who fails the first examination, can re-take a new examination.
- A candidate cannot take comprehensive examinations more than twice.

It is the candidate's responsibility to keep in touch with the Director of Graduate Studies for any updates on the examination.