M.S. MATHEMATICS

* The Master of Science in Mathematics is currently pending approval to change the total number of credit hours from 36 to 30 beginning in the Fall 2024. Please see an advisor for the most up to date information on this degree.

Overview

The M.S. in Mathematics is designed to enhance and enrich training in the field of mathematics for individuals who teach at the secondary level or in community colleges, and to provide a rigorous depth and breadth of mathematical study for people who plan to work as applied mathematicians in industry or government agencies, as well as those who wish to continue their studies at the doctoral level.

Program Level Student Learning Outcomes

The student will be able to:

- Recognize and create good mathematical arguments, and effectively communicate them in written and oral form.
- Apply mathematical methods to analyze and solve problems.
- Demonstrate a rich understanding of complex mathematical structures, processes, and underlying theories.
- Conduct secondary research to demonstrate an understanding of the principles and methods of mathematical research.

Entry Requirements

Students will be admitted into the MS Mathematics major by the faculty once the following application criteria are met:

Successful admission to graduate school.

And the following:

1. All students must have either a Bachelor Science (BS) or Bachelor Art (BA) degree in Mathematics or a BS/BA degree with sufficient mathematics related coursework including but not limited to Calculus I-III (or equivalent).

2. Students without a BS/BA degree in Mathematics will be required to complete leveling courses prior to admittance into the program. The amount and nature of the leveling courses are defined on a case-by-case basis and determined by the Mathematics Graduate Coordinator.

Master of Science Mathematics - With Thesis Program Requirements

Code	Title	Credit Hours
MATH 5305	Probability & Statistics	3
MATH 5308	Abstract Algebra: Examples and Applications	3
MATH 5360	Computational Mathematics Theory and Applications	3
or MATH 5315	Operations Research II	
MATH 5350	Applied Linear Algebra	3
Approved graduate-level Mathematics electives		6
MATH 5198	Thesis	6
Approved Mathematics or other supporting field courses		6
Total Credit Hours		**30**

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MATH 5360	Computational Mathematics Theory and Applications	3
or MATH 5315	Operations Research II	
MATH 5350	Applied Linear Algebra	3
Approved graduate-level Mathematics electives		6
Approved Mathematics or other supporting field courses		12
MATH 5090	Comprehensive Examination	0
Total Credit Hours		**30**