

# Mathematics

Bachelor of Science

Students in the Mathematics program will develop their analytical skills and learn how to work in a problem-solving environment. Advanced modeling, theory and methods make up the foundation of a mathematics degree and allow students to enter the work force or continue their education.

## Career Options:

- Education
- Financial Services
- Cryptography
- Actuarial Science
- Biomathematics

## Major Requirements:

Calculus I  
Calculus II  
Multivariate Calculus  
Probability and Statistics  
Transition to Advanced Mathematics  
Linear Algebra  
Abstract Algebra  
Mathematics Seminar

*Three of the following elective mathematics courses:*

Transition to Advanced Mathematics  
Discrete Methods  
Geometry  
Introduction to Complex Variable  
Elementary Differential Equations  
Special Topics

*Programming Component course (3 semester hours):*  
Programming Structures  
*or other course approved by adviser.*

*Applied Mathematics course (3 semester hours) from:*  
Analytical Chemistry I w/Laboratory  
Physical Chemistry I w/Laboratory  
Genetics  
Global Water Issues  
Ecology  
Ecological Methods  
Corporate Finance  
Operations Management  
Object-Oriented Programming

12 semester hours of courses in the natural sciences  
(not including ERS 131, 132, 141, 142, 171, 172 and CHM 101, 102).

## Minor Requirements:

Calculus I  
Calculus II  
Elementary Statistics  
or Probability and Statistics

*Three of the following elective mathematics courses:*

Multivariate Calculus  
Number Theory  
Discrete Methods  
Geometry  
Transition to Advanced Mathematics

Linear Algebra  
Abstract Algebra  
Introduction to Complex Variable  
Elementary Differential Equations  
Special Topics

## Department Contact:

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