



# Mathematics, B.S. *major*

## Actuarial Emphasis

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Required Credits: 57  
 Required GPA: 2.25

### I REQUIRED CORE COURSES

Complete the following courses:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 3310 Linear Algebra (4 credits)

### ACTUARIAL EMPHASIS

COMPLETE THE FOLLOWING COURSES:

- ACCT 2101 Principles of Accounting I (3 credits)
- ACCT 2102 Principles of Accounting II (3 credits)
- BUAD 3771 Financial Management (3 credits)
- BUAD 3772 Advanced Financial Management (3 credits)
- CS 2321 Computer Science I (4 credits)
- ECON 2000 Principles of Microeconomics (3 credits)
- ECON 2100 Principles of Macroeconomics (3 credits)
- STAT 3610 Time Series Analysis (3 credits)
- STAT 3631 Probability And Statistics I (4 credits)
- STAT 3632 Probability And Statistics II (3 credits)

SELECT ONE OF THE FOLLOWING COURSES:

- MATH 2490 Differential Equations (4 credits)
- MATH 3710 Mathematical Modeling (3 credits)
- MATH 3720 Numerical Methods (3 credits)
- MATH 4760 Topics in Applied Mathematics (3 credits)

### Program Learning Outcomes | Mathematics, B.S.

1. Knowledge: Students will understand the content and methods of the core areas of undergraduate mathematics.
2. Analysis: Students will identify, interpret and analyze problems, discern structure and pattern and make conjectures.
3. Application: Students will apply appropriate procedures and technology to solve problems.
4. Proof: Students will apply creative and analytic thinking to develop clear and valid mathematical arguments.
5. Communication: Students will communicate mathematical ideas and understanding effectively.
6. Career Readiness: Students will be prepared for careers in industry and further study in mathematics.

### Suggested Semester Schedule | Mathematics, B.S.

The following is a list of required Mathematics Major, B.S. courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

#### Freshman

- MATH1470
- MATH2471
- MATH2472
- Core Curriculum requirements

#### Sophomore

- MATH2210
- MATH2480
- MATH3310
- Courses in the Field of Emphasis (consult with advisor)
- Core Curriculum requirements

#### Junior/Senior

- Courses in the Field of Emphasis (consult with advisor)
- Complete Core Curriculum requirements