

## Mathematical Sciences Program

The mission of the Mathematical Sciences Program is to enable students to develop critical thinking skills and become effective problem solvers while mastering a broad spectrum of knowledge from the mathematical sciences. The general student should have the mathematical literacy required for his/her area of study and to function competently in a modern technological society.

The minors' studies focus on the mathematical sciences as both an object of study and a tool for application. Upon completion, students with a minor in mathematics should be prepared for a broad spectrum of professional opportunities, both in careers and in graduate and professional schools.

### Learning Outcomes: Mathematical Sciences

Upon completion of a minor in the mathematical sciences:

1. Students will demonstrate understanding of the mathematics that forms the core of the undergraduate curriculum, such as: calculus I and II, multivariable calculus, linear algebra, and differential equations.
2. Students will be able to apply mathematical principles to solve real-world problems.
3. Students will be able to read mathematics and communicate mathematical ideas and information effectively in oral and written reports.

Upon completion of courses in the mathematical sciences used to fulfill General Education requirements:

1. Students will demonstrate critical thinking skills by being able to use fundamental mathematical principles to solve real-world problems effectively in written format.
2. Students will demonstrate an understanding of, and an appreciation for, the limitations of quantitative analysis.

### Minor in Mathematics

### 23-24 Credits

A minor in mathematics consists of MAT 221 and 222, three mathematics courses at the 300-400 level, and one additional course in mathematics or computer and information science.

#### Required Courses:

MAT 221 Calculus I	4
MAT 222 Calculus II	4
MAT 310 Multivariable Calculus	4
MAT 312 Linear Algebra	4
MAT 340 Ordinary Differential Equations	4

#### Additional Requirements:

One elective course in MAT or CIS	3-4
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