### **Duluth Campus**

# **Mathematics Minor**

Mathematics & Statistics

### **Swenson College of Science and Engineering**

- Program Type: Undergraduate minor related to major
- Requirements for this program are current for Fall 2017
- Required credits in this minor: 22 to 23

The minor in mathematics is based on the completion of the traditional core of calculus, differential equations, and elementary linear algebra commonly required of undergraduate physical science, engineering, and mathematics degrees. Additional, more advanced, elective classes are required, as well. The minor in mathematics certifies a student's quantitative, problem-solving, and critical thinking skills.

## **Program Delivery**

This program is available:

• via classroom (the majority of instruction is face-to-face)

## Minor Requirements

1. Only one of MATH 3280 and MATH 3326 may count and only one of STAT 3411 and STAT 3611 may count.

#### Core Courses (13 - 14 cr)

Calculus I

MATH 1290 - Calculus for the Natural Sciences [LE CAT2, LOGIC & QR] (5.0 cr)

or MATH 1296 - Calculus I [LE CAT, LOGIC & QR] (5.0 cr)

Calculus II

MATH 1297 - Calculus II [LOGIC & QR] (5.0 cr)

**Core Course** 

MATH 3280 - Differential Equations with Linear Algebra (4.0 cr)

or MATH 3326 - Vectors and Matrices (3.0 cr)

#### Electives (9 cr)

Each course must be a minimum of 3 credits.

Take 3 or more course(s) totaling 9 or more credit(s) from the following:

- •MATH 3xxx
- •MATH 4xxx
- •MATH 5xxx
- •STAT 3xxx
- •STAT 4xxx
- •STAT 5xxx