



Duluth Campus

Statistics Minor

Mathematics & Statistics

Swenson College of Science and Engineering

- Program Type: Undergraduate minor related to major
- Requirements for this program are current for Fall 2022
- Required credits in this minor: 20 to 22

The minor in statistics is based on the completion of traditional mathematics courses including Calculus and Linear Algebra, a required introductory statistics course, one advanced course in a traditional statistics area, and two additional, advanced elective statistics courses. The minor in statistics 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. The Statistics minor is not allowed with a Mathematics major or with a Statistics major.
2. Students may not receive both a minor in Mathematics and a minor in Statistics.

Calculus (5 cr)

Students choosing MATH 3280, STAT 3411, 3612, or 4511 as options below will be required to complete the prerequisite course MATH 1297 Calculus II.

[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)

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

Additional Mathematics (3 - 4 cr)

[MATH 3326](#) - Vectors and Matrices (3.0 cr)

or [MATH 3280](#) - Differential Equations with Linear Algebra (4.0 cr)

Introduction to Statistics (3 - 4 cr)

[STAT 3411](#) - Engineering Statistics (3.0 cr)

or [STAT 3611](#) - Introduction to Probability and Statistics (4.0 cr)

Additional Statistics (3 cr)

[STAT 3612](#) - Introduction to Probability and Statistics II (3.0 cr)

or [STAT 4511](#) - Regression Analysis (3.0 cr)

or [STAT 5411](#) - Analysis of Variance (3.0 cr)

Statistics Electives (6 cr)

Each elective course must be 3 credits or more. Neither STAT 3411 nor 3611 can be counted as Statistics Electives. Any of STAT 3612, 4511, and/or 5411, which are not counted in the Statistics Requirement category, may count towards the Statistics Electives. Take 2 or more course(s) totaling 6 or more credit(s) from the following:

- STAT 3xxx
- STAT 4xxx
- STAT 5xxx