### **Duluth Campus**

# Computer Engineering Minor

Electrical Engineering

### Swenson College of Science and Engineering

- Program Type: Undergraduate minor related to major
- Requirements for this program are current for Fall 2021
- Required credits in this minor: 36

The Computer Engineering minor provides students with basic knowledge and skills needed to understand, analyze, and design computer hardware and software systems. It provides high quality education in topics related to computer engineering that will prepare students for employment opportunities in the private and public sectors, graduate studies, and research.

# **Program Delivery**

This program is available:

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

### Minor Requirements

Lower Division (32 cr)

#### Calculus I and II Requirement

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

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

#### **Computer Science**

CS 1511 - Computer Science I [LE CAT] (5.0 cr)

or CS 1581 - Honors: Computer Science I [LE CAT] (5.0 cr)

CS 1521 - Computer Science II (5.0 cr)

## **Computer Engineering Core**

CS 2511 - Software Analysis and Design (4.0 cr)

EE 1315 - Digital Logic (4.0 cr)

CS 2521 - Computer Organization and Architecture (4.0 cr)

or EE 2325 - Microprocessor Systems (4.0 cr)

# Advanced Core Requirement (4 cr)

CS 4412 - Computer Architecture (4.0 cr) or EE 4305 - Computer Architecture (4.0 cr)