



Duluth Campus

Electrical 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 2017
- Required credits in this minor: 43 to 44

The Electrical Engineering minor provides students with basic knowledge and skills needed to understand electrical circuits, signal analysis, electronics and digital systems. It provides high quality education in electrical engineering related topics that will prepare students for employment opportunities in the private and public sectors.

Program Delivery

This program is available:

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

Minor Requirements

Lower Division (40 cr)

Engineering

- [EE 1315](#) - Digital Logic (4.0 cr)
- [EE 2006](#) - Electrical Circuit Analysis (4.0 cr)
- [EE 2111](#) - Linear Systems and Signal Analysis (4.0 cr)
- [EE 2212](#) - Electronics I (4.0 cr)

Mathematics

Calculus I

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

Calculus II

- [MATH 1297](#) - Calculus II [LOGIC & QR] (5.0 cr)
- [MATH 3280](#) - Differential Equations with Linear Algebra (4.0 cr)

Physics

Physics I course

- [PHYS 2013](#) - General Physics I [LE CAT, NAT SCI] (4.0 cr)
- [PHYS 2017](#) - Honors: General Physics I [NAT SCI] (4.0 cr)

Physics I lab

- [PHYS 2014](#) - General Physics Lab I [NAT SCI] (1.0 cr)

Physics II course

- [PHYS 2015](#) - General Physics II (4.0 cr)
- or [PHYS 2018](#) - Honors General Physics II (4.0 cr)

Physics II lab

- [PHYS 2016](#) - General Physics Lab II (1.0 cr)

Upper Division (3 - 4 cr)

Take 1 or more course(s) from the following:

- [EE 3151](#) - Control Systems (4.0 cr)
- [EE 3235](#) - Electronics II (4.0 cr)
- [EE 3445](#) - Electromagnetic Fields (3.0 cr)
- [EE 4501](#) - Power Systems (4.0 cr)
- [EE 4611](#) - Introduction to Solid-State Semiconductors (3.0 cr)