

Duluth Campus

Geological Sciences Minor

D Earth & Environmental Sci

Swenson College of Science and Engineering

- Program Type: Undergraduate minor related to major
- Requirements for this program are current for Fall 2019
- Required credits in this minor: 27 to 29

The geological sciences minor enhances the student's understanding of and familiarity with earth materials and processes, and provides valuable background for many environmental careers and applications.

Program Delivery

This program is available:

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

Minor Requirements

Minor Courses (23-24 cr)

Minor Core

[GEOL 1110](#) - Geology and Earth Systems [LE CAT4, NAT SCI, SUSTAIN] (4.0 cr)

or [GEOL 1610](#) - Oceanography [LE CAT5, NAT SCI, SUSTAIN] (3.0 cr)

or [GEOG 1414](#) - Physical Geography [LE CAT4, NAT SCI, SUSTAIN] (4.0 cr)

[ESCI 2010](#) - Surface Processes (4.0 cr)

[GEOL 2110](#) - Earth History (4.0 cr)

[GEOL 2120](#) - The Earth's Dynamic Interior (3.0 cr)

[GEOL 2311](#) - Mineralogy (4.0 cr)

Chemistry I

Take CHEM 1113 only or both CHEM 1153 and CHEM 1154.

[CHEM 1113](#) - Introduction to General, Organic, and Biological Chemistry I [LE CAT4, NAT SCI] (5.0 cr)

or [CHEM 1153](#) - General Chemistry I [LE CAT5, NAT SCI] (4.0 cr)

[CHEM 1154](#) - General Chemistry Lab I [LE CAT4, NAT SCI] (1.0 cr)

Electives (4-5 cr)

Take 1 or more course(s) totaling 4 or more credit(s) from the following:

- [ESCI 3202](#) - Energy Resources (3.0 cr)
- [GEOL 2312](#) - Petrology (5.0 cr)
- [GEOL 3420](#) - Sedimentology and Stratigraphy (4.0 cr)
- [GEOL 4450](#) - Structural Geology (5.0 cr)
- [GEOL 5240](#) - Physical Hydrogeology (4.0 cr)
- [GEOL 5250](#) - Hydrogeology (4.0 cr)