### **Duluth Campus**

# Geological Sciences M.S.

D Earth & Environmental Sci

#### Swenson College of Science and Engineering

Link to a list of faculty for this program.

- Students will no longer be accepted into this program after Fall 2020. Program requirements below are for current students only.
- Students interested in Geological Sciences M.S. see Earth Sciences M.S.

#### **Contact Information:**

Department of Geological Sciences, University of Minnesota Duluth, 229 Heller Hall, 1114 Kirby Drive, Duluth, MN 55812 (218-726-

7239; fax: 218-726-7218) Email: <u>dees@d,umn.edu</u>

Website: http://www.d.umn.edu/dees/

- Program Type: Master's
- Requirements for this program are current for Spring 2021
- Length of program in credits: 31
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the <u>General Information</u> section of the catalog website for requirements that apply to all major fields.

The master of science program in geological sciences includes areas of environmental geoscience, economic geology, geophysics, glacial geology and geomorphology, hydrogeology, igneous and metamorphic petrology, isotope and aqueous geochemistry, limnogeology, paleoclimatology, planetary geology, sedimentology and stratigraphy, surface processes, and structure-tectonics. Several of these areas are strengthened by collaboration with the Large Lakes Observatory and the Natural Resources Research Institute.

### Program Delivery

This program is available:

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

## Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

A four-year BS or BA degree in geology or a related field in engineering, basic science, or mathematics is required.

Other requirements to be completed before admission:

Most candidates will have completed a bachelor's degree in geology, geophysics, or a related field. However, students with degrees in fields such as chemistry, physics, or biology are encouraged to apply. At least one year of study in calculus, chemistry, and physics is required. Field camp and/or undergraduate research experience is recommended.

Applicants must submit their test score(s) from the following:

• GRE

International applicants must submit score(s) from one of the following tests:

- TOEFL
- Internet Based Total Score: 79
  Internet Based Writing Score: 21
  Internet Based Reading Score: 19
- IELTS
- Total Score: 6.5
- MELAB
- Final score: 80

The preferred English language test is Test of English as Foreign Language

Key to test abbreviations (GRE, TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the <u>General Information</u> section of the catalog website.

## **Program Requirements**

Plan A: Plan A requires 15 to 21 major credits, 0 to 6 credits outside the major, and 10 thesis credits. The final exam is oral.

Plan B: Plan B requires 25 to 31 major credits and 0 to 6 credits outside the major. The final exam is written.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

The master of science degree is offered under Plan A (thesis) and Plan B (non-thesis). Courses are selected with approval of the student's advisor and the director of graduate studies. All courses must be at the 4xxx, 5xxx, or 8xxx level, however no more than 9 credits at the 4xxx level may apply.

For Plan A, a candidacy exam that involves the oral defense of a written thesis research proposal during the second semester of residency is required.

Plan B requires a capstone project.

#### Plan A or Plan B

#### Plan A

EES 8200 - Professional Issues in Earth and Environmental Science (1.0 cr)

EES 8777 - Thesis Credit: Master's (1.0 - 10.0 cr)

Take 14 or more credit(s) from the following:

- •ESCI 4xxx
- •ESCI 5xxx
- •ESCI 8xxx
- •GEOL 4xxx
- •GEOL 5xxx
- •GEOL 8xxx

Any additional credits required to meet the minimum 31 credits required for the degree may be taken outside the major. These must be taken at the 4XXX or above level. No more than 9 credits of 4xxx level courses may be included in a students degree plan.

## or Plan B

EES 8200 - Professional Issues in Earth and Environmental Science (1.0 cr)

Take 24 or more credit(s) from the following:

- •ESCI 4xxx
- •ESCI 5xxx
- •ESCI 8xxx
- •GEOL 4xxx
- •GEOL 5xxx

Any additional credits required to meet the minimum 31 credits required for the degree may be taken outside the major. These must be taken at the 4XXX or above level. No more than 9 credits of 4xxx level courses may be included in a students degree plan.