

Duluth Campus

Master of Engineering M.Eng.

Swenson College of Science & Engineering

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Link to a [list of faculty](#) for this program.

Contact Information:

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Website: <http://www.d.umn.edu/scse/degrees/MEng/index.html>

- Program Type: Master's
- Requirements for this program are current for Fall 2020
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Engineering

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The professional master of engineering emphasizes the practice of engineering in either the private or public sector. The program focuses on developing competencies in the areas of engineering design, problem solving, and practice beyond what can be achieved in earning a bachelor of science degree in a given engineering discipline.

An M.Eng. graduate student is expected to have a focus and degree designation in one of the UMD disciplines of Civil Engineering, Chemical Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering or Mining and Minerals Processing.

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.

Other requirements to be completed before admission:

1. Completed an undergraduate degree in an engineering program, or upon approval by the SCSE MEng Director of Graduate Studies, in a related discipline, e.g. computer science, geology, physics etc.
2. The MEng prefers an undergraduate grade point average (GPA) of 3.00 (on a 4.0 scale) for admission. This preferred performance minimum of 3.0/4.0 must be from an ABET accredited program or equivalent. Industrial experience and professional licensure will be considered for applicants with a grade point less than the preferred minimum.
3. Two letters of recommendation: academic and/or professional references.
4. For international applicants whose native language is not English, a TOEFL score preferred performance minimum is 79 on the internet based test.
5. The GRE score is recommended but not required.

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

Key to [test abbreviations](#)(GRE, TOEFL).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan C: Plan C requires 15 to 27 major credits and 3 to 15 credits outside the major. There is no final exam. A capstone project is required.

Capstone Project: All students take 3-6 credits of project courses within their major. As part of these credits, a project report or presentation may be required by the departmental adviser and department.

This program may not be completed with a minor.

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

The M.Eng. degree program is primarily a coursework degree program with a minimum of 3 credits and a maximum of 6 credits allocated to a design project to be arranged between the departmental adviser and student. The 30 credits require a minimum of 14 credits at 5XXX or higher, and a cap of 6 credits on 4XXX courses. There is no requirement for a final exam above and beyond what is required in individual courses.

Major Plan Department Requirements (12 cr)

In consultation with their Departmental Advisor, students may choose to include one or more 8XXX courses in their Program of Study. It should be noted that even though there are no requirements for 8XXX courses, MEng students who meet the course prerequisites for 8xxx courses in Electrical Engineering, Engineering Management, Geologic Sciences, and Computer Science will be encouraged to include these courses in their degree program. Selected 4xxx courses may apply.

Take 12 or more credit(s) from the following:

- CE 5xxx
- CE 8xxx
- CHE 5xxx
- CHE 8xxx
- EE 5xxx
- EE 8xxx
- IE 5xxx
- IE 8xxx
- ME 5xxx
- ME 8xxx

Engineering Course Project (3 - 6 cr)

Project within the Major Plan Department to be arranged by the Departmental Advisor and student.

Take 3 - 6 credit(s) from the following:

- [CE 5555](#) - Project Credits: Master of Engineering (Civil) (3.0 - 6.0 cr)
- [CHE 5555](#) - Project Credits: MEng - Chemical Engineering (3.0 - 6.0 cr)

Other Engineering (6 - 12 cr)

Courses selected in collaboration with the Departmental Advisor; selected 4xxx level courses may apply with approval.

Take 6 - 12 credit(s) from the following:

- CE 5xxx
- CE 8xxx
- CHE 5xxx
- CHE 8xxx
- EE 5xxx
- EE 8xxx
- IE 5xxx
- IE 8xxx
- ME 5xxx
- ME 8xxx

Non Engineering (0 - 3 cr)

In order to reach the 30 minimum required credits, elective credits can be from a non-engineering approved graduate course list. Courses must be selected in collaboration with the Departmental Advisor.