

# CIVIL ENGINEERING - MASTER OF SCIENCE (MS)

The department's objective is to produce engineers capable of identifying, preventing and solving building, construction and environmental problems. In addition to the well-established graduate programs in environmental, water resource and geotechnical engineering, students in the department may also choose to study in the emerging field of geoenvironmental engineering. Campus facilities, including a National Science Foundation-funded earthquake simulator, permit a case-study approach, which exposes students to real-world problems and allows experimentation, testing and analysis.

Areas of study within the Civil Engineering Department are:

- Building systems engineering
- Civil systems engineering
- Construction engineering and management
- Engineering science
- Environmental engineering
- Environmental fluid mechanics and hydraulic engineering
- Geoenvironmental engineering
- Geotechnical engineering and geomechanics
- Global engineering
- Structural engineering and structural mechanics
- Hydrology and water resources management

For more information, visit the department's Graduate Studies (<http://www.colorado.edu/ceae/prospective-students/graduate-studies/>) webpage.

## Bachelor's–Accelerated Master's Degree Program

Students may earn this degree as part of the Bachelor's–Accelerated Master's (BAM) degree program, which allows currently enrolled CU Boulder undergraduate students the opportunity to earn a bachelor's and master's degree in a shorter period of time.

For more information, see the Accelerated Master's tab for the associated bachelor's degree(s):

- Architectural Engineering - Bachelor of Science (BS) (<https://catalog.colorado.edu/undergraduate/colleges-schools/engineering-applied-science/programs-study/civil-environmental-architectural-engineering/architectural-engineering-bachelor-science-bsare/#acceleratedmasterstext>)
- Civil Engineering - Bachelor of Science (BS) (<https://catalog.colorado.edu/undergraduate/colleges-schools/engineering-applied-science/programs-study/civil-environmental-architectural-engineering/civil-engineering-bachelor-science-bs/#acceleratedmasterstext>)
- Environmental Engineering - Bachelor of Science (BS) (<https://catalog.colorado.edu/undergraduate/colleges-schools/engineering-applied-science/programs-study/civil-environmental-architectural-engineering/environmental-engineering-bachelor-science-bs/#acceleratedmasterstext>)

## Requirements

### Course Requirements

The Master of Science degree in civil engineering requires a total of 30 credit hours (including coursework and thesis hours) with a grade of B- or better and a cumulative GPA of at least 3.00. At least 24 credit hours must be completed at the 5000 level or above, and at least 18 of those credits must be in CVEN courses. In addition, specific focus area requirements must be met.

Students may apply up to 6 credit hours of approved 4000-level courses from departments outside CEAE to their master's degree if the courses fit with the student's degree plan.

### Degree Plans

#### Plan I: Thesis Option

Students must complete 6 credit hours of MS thesis. Plan I culminates with an oral presentation and/or written report or oral examination.

#### Plan II: Non-Thesis Option

There are two non-thesis options:

- Students choosing Plan IIa must complete at least 30 credit hours of coursework, including a 3-credit independent study report.
- Students choosing Plan IIb must complete at least 30 credit hours of coursework and pass a final exam.

### Time Limit

All degree requirements must be completed within four years of the date of commencing coursework. Most students complete the degree in one to two years.