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
• construction engineering and management
• engineering for developing communities
• environmental engineering
• geoenvironmental engineering
• geotechnical engineering
• civil systems engineering
• engineering science
• structural engineering
• hydrology, water resources and environmental fluid mechanics
• water engineering and management

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

Concurrent Degree Programs

BS/MS in Civil Engineering
A concurrent BS/MS degree program in civil engineering is available. Students may apply to the program when they have 75–110 credit hours toward the undergraduate BS degree (including completed and in-progress courses). Once accepted into the program, students are allowed to count 6 credit hours taken at the graduate level for both the BS and MS degrees (if certain grade and GPA requirements are met); this allows a student to obtain both degrees in five to six years.

For more information, visit the department’s BS/MS Program (http://www.colorado.edu/ceae/current-students/undergraduate-studies/bsms-program) webpage.

BS/MS in Environmental and Civil Engineering
A concurrent environmental engineering BS and civil engineering MS degree program is available. Students may apply to the program when they have 75–110 credit hours toward the undergraduate EVEN degree (including completed and in-progress courses). Once accepted into the program, students may be allowed to count 6 credit hours taken at the graduate level for both the environmental engineering BS and the civil engineering MS degrees, thus allowing them to obtain both degrees in five to six years.

For more information, visit the department’s BS/MS Program (http://www.colorado.edu/ceae/current-students/undergraduate-studies/bsms-program) webpage.

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.

For more information, visit the department’s BS/MS Program (http://www.colorado.edu/ceae/current-students/undergraduate-studies/bsms-program) webpage.