

## **Graduate Degrees**

Master of Science Master of Engineering Doctor of Philosophy

## **Specialty Areas**

#### **Master of Science**

Construction Engineering and Management
Environmental and
Sustainability Engineering
Geographic Information
Systems (GIS)
Geotechnical Engineering
Hydrologic and Hydraulic
Engineering
Structural Engineering
Transportation Engineering

### **Master of Engineering**

Construction Engineering and Management Geomatics & Geographic Information Systems (GIS) Sustainable Infrastructure Transportation Systems The civil engineering graduate programs at CU Denver are designed for students who want to advance their academic and professional skills in civil engineering and related areas. Depending on a student's pace, our master's program takes two to four years to complete on average. All graduate courses are offered in the afternoons, evenings or on Saturdays. Some courses, including all GIS classes, are offered online.

## Master's programs

The Master of Science (MS) degree is for applicants with an undergraduate degree in engineering. The Master of Engineering (MEng) degree is for applicants from a diverse background of undergraduate degrees. It is intended to address new technology areas requiring interdisciplinary backgrounds. All master's students must complete 30 credit hours of work to receive their degree.

## **DEGREE REQUIREMENTS**

MS students have two options for completing their degree.

#### Plan 1 - Master's Thesis

This plan requires that students complete 24 credit hours of courses and 6 credit hours of master's thesis work.

## Plan 2 - Master's Report

This plan requires 27 credit hours of course work and 3 master's report credits.

MEng students must follow Plan 2. Additionally, at least 15 hours must be completed with civil engineering classes, including the master's report. The remaining 15 hours may be completed in related disciplines that supplement their area of study.

Both MS and MEng students must satisfactorily complete a written comprehensive exam and an oral defense of either

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the master's thesis or master's report to a committee of three or more graduate faculty members.

## ADMISSIONS REQUIREMENTS

- Application for admission
- 3 letters of recommendation
- 1 copy of all transcripts
- \$50 processing fee (\$75 for international applicants)
- Bachelor's or master's degree
- Previous GPA above 3.0

## **Graduate Record Exam (GRE)**

Official GRE scores are required for admission spring 2015 or later, except as noted below.
Use Institution Code 4875,
Department Code 1102.

GRE scores are optional for applicants with one of the following: an earned bachelor's degree from an accredited U.S. institution with a GPA of at least 3.0, or an earned master's degree from an accredited U.S. institution with a GPA of at least 3.5.

#### **Transfer Credit**

Master's students may transfer up to 9 credit hours from another institution toward their master's degree, if approved by their advisor.

## **Program Prerequisites**

Prerequisite classes are in addition to the 30 credits needed to complete a master's degree. Students may complete prerequisite classes either before or after being admitted to a degree program. For applicants completing prerequisites after admission, all prerequisite courses must be completed before 12 of the 30 credit hours are complete.

#### **International Admissions**

International applicants should apply through the Office of International Affairs.

## **Doctoral Degree**

Specialty tracks:

- Civil engineering systems
- Environmental and sustainability engineering
- Geotechnical engineering
- Hydrologic and hydraulic engineering
- Structural engineering
- Transportation engineering

## ADMISSIONS REQUIREMENTS

In addition to the admissions requirements listed for master's students, doctoral applicants need to have the support of a faculty advisor before they are admitted. Once doctoral students are approved by the graduate admissions committee, their application must be reviewed again by the Department of Civil, Environmental and Architectural Engineering at CU Boulder, as the programs are jointly administered.

## **Degree Requirements**

Doctoral students must complete a minimum of 30 credit hours of course work and a minimum of 30 hours of dissertation research credit. At least 9 credit hours of course work must be completed at CU Boulder for the five traditional specialty tracks. For the civil engineering systems specialty, at least 3 hours of graduate credit must be taken at CU Boulder.

### **Transfer Credit**

Doctoral students may transfer up to 15 credits toward their required course work but not for dissertation hours. For students completing their master's degree at CU Denver or Boulder, up to 21 credits may be transferred.

#### **Program Prerequisites**

Prerequisites are the same as those described for the master's degrees. In addition, doctoral applicants must have already earned a master's degree or be in the process of completing a master's degree before applying to the doctoral program.

# Engineering and Applied Science PhD

Civil engineering is a host department for the interdisciplinary Engineering and Applied Science PhD. Learn more at ucdenver.edu/civil and select Graduate Programs.

## **Certificate Programs**

The department offers five four-course certificates that may be completed on their own or used as a stepping stone into the masters-level programs. Contact the department for specifics on each program.

#### **GIS**

This certificate is for students who want to get a taste of the GIS program before applying and for professionals who need a working knowledge of GIS.

#### **Water Resources**

This certificate offers an interdisciplinary curriculum in the field of hydrologic and hydraulic engineering.

## Integrated Construction, Management & Leadership

This certificate is designed to launch designers, architects, engineers, and business entrepreneurs into the world of construction.

## Construction Project Management

This certificate is designed to build skills and teach critical management techniques that enable individuals and teams to run projects within scheduled, budget and quality requirements.

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