

# CIVIL AND ENVIRONMENTAL ENGINEERING (M.S.)

<https://ceps.unh.edu/civil-environmental-engineering/program/ms/civil-environmental-engineering>

## Description

The goal of the Civil and Environmental Engineering program is to elucidate civil and environmental engineering technology by involving students in the design and construction of sustainable infrastructure projects that emphasize safety and public health. Our graduates enhance the quality of life for people both locally and around the world by providing safe structures such as bridges, highways, skyscrapers, tunnels and dams, and by helping to restore and maintain water quality and the environment. Civil Engineering has always been an exciting yet flexible profession filled with opportunities. The Master of Science in Civil Engineering requires the completion of a thesis in addition to coursework.

## Requirements

All master of science degree students must complete a minimum of **31 total credits** that includes a minimum of 24 credit hours of regular coursework, 6 thesis credits (CEE 899 Master's Thesis ) and a one-credit seminar course. UNH bachelor's degree students admitted to the Accelerated Master's Program may register for a maximum of 8 credits of graduate-level courses prior to completing their bachelor's degree. Such courses may, upon recommendation of the department and approval of the Graduate School, count toward both a bachelor's and master's degree.

A formal oral presentation/thesis defense is required. All M.S. degree students are eligible for teaching or research assistantships and are required to register for Master's Student Seminar (CEE 897 Masters Student Seminar ) for one semester. Students are required to make one presentation in CEE 897 Masters Student Seminar during their program of study. For graduation, a grade of B- or better in each course, an overall B average (3.00 GPA), and a successful thesis defense must be achieved.

Specific course requirements vary with focus area within CEE, please refer to the "explore program details" section on our website.

## Accelerated Master's

This graduate program is approved to be taken on an accelerated basis in articulation with certain undergraduate degree programs.

General Accelerated Master's policy, note that some programs have additional requirements (e.g. higher grade expectations) compared to the policy.

Please see the Graduate School website and contact the department directly for more information.

## Student Learning Outcomes

### Program Learning Outcomes

- Identify and use advanced mathematical, computational, design, and/or experimental skills to solve complex civil and environmental engineering problems;
- Demonstrate advanced technical knowledge in one or more civil and environmental engineering subject areas (environmental, geotechnical, materials, structural, sustainability, transportation, or water resources);
- Formulate hypotheses, design experiments, collect and analyze data, and interpret results;
- Propose, plan, and execute an independent research project related to civil and environmental engineering;
- Effectively communicate and defend technical ideas, designs, or research results in written and oral form; and
- Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of sustainable engineering solutions in global, social, economic, public policy, and environmental issues.