DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

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Civil engineers apply scientific principles to the design society’s infrastructure. The pyramids of Egypt, the irrigation systems that supported agriculture in ancient Babylonia and Assyria, the roads that linked the Roman Empire, and the railroads, bridges and barge canals of the early United States were all civil engineering projects that served the people of their times. Today’s civil engineers are still involved in designing the infrastructure necessary for modern society to function. A civil engineer may be involved in the design and construction of highways, bridges, buildings, water conveyance systems, water reuse facilities, wastewater treatment plants, dams, and airports. Civil engineers may also be involved in planning for traffic controls, flood plain management, remediation of contaminated groundwater, and water and air quality management. Graduates of civil engineering programs may work in engineering consulting firms, in government agencies at the local/state/federal level, for non-governmental organizations (NGOs), or with construction contractors.

Environmental sensitivity and sustainable development are emerging as the tenets for continued survival on our planet. Civil engineers develop innovative solutions to ensure wise stewardship of our limited natural resources. Students who enter civil engineering can anticipate a very challenging and rewarding career.

Lower-division courses in civil engineering consist of basic courses in science, mathematics, and engineering required of most students within the College of Engineering. Course work in the junior year provides students with a broad background in all of the civil engineering subdisciplines, while technical electives in the senior year allow some specialization. For civil engineering students interested in geology, there is an option to complete a minor in Geological and Mining Engineering.

The Department of Civil and Environmental Engineering occupies the first floor of the Buchanan Engineering Laboratory Building with some additional office and laboratory spaces in the basement and on the second floor of the building.

The Department offers five graduate degree programs:

1. Master of Science in Civil Engineering (30 credits, with thesis),
2. Master of Engineering in Civil Engineering (33 credits, non-thesis),
3. Master of Science in Geological Engineering (30 credits, with thesis),
4. Master of Science in Geological Engineering (30 credits, non-thesis)
5. Doctor of Philosophy in Civil Engineering

Course work requirements in each of these graduate degree programs are relatively flexible depending on student interest and course availability. Financial assistance is available on a competitive basis in the form of teaching and research assistantships, but to thesis and dissertation students only. Applicants to all graduate programs must meet all university admission requirements. Applicants to graduate study in civil engineering should hold degrees in civil engineering or in another engineering discipline. Exceptions are made only if deficiency courses are taken before admission (see department website for details). Students with a background in geology or hydrology are welcome to apply to the graduate program in geological engineering, but must take any deficiency courses before admission. We do not currently require the GRE.

The mission of the Department of Civil and Environmental Engineering is to provide a high quality education at both the undergraduate and graduate levels. Upon completion of the University of Idaho’s bachelor’s degree in civil engineering, we expect our graduates to be:

1. competent in the fundamentals of engineering,
2. able to analyze, design and communicate civil and environmental engineering systems and processes
3. aware of the social, economic and environmental implications of engineered projects, and
4. responsible, ethical, and committed to life-long learning.

The Bachelor of Science (B.S.) degree program in civil engineering at the University of Idaho is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Majors

• Civil Engineering (B.S.C.E.) (https://catalog.uidaho.edu/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-bsce)

Minors

• Geological and Mining Engineering Minor (https://catalog.uidaho.edu/colleges-related-units/engineering/civil-environmental-engineering/geological-engineering-minor)

Civil and Environmental Engineering Graduate Program

Graduate study is offered with specialization in the following subdisciplines of civil engineering: hydraulics and hydrologic engineering, ecohydrology (in Boise only), environmental engineering, structural engineering, geotechnical engineering, highway and pavement materials, and transportation engineering.

• Civil Engineering (M.S.) (https://catalog.uidaho.edu/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-ms)
• Civil Engineering (M.Engr.) (https://catalog.uidaho.edu/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-mengr)
• Civil Engineering (Ph.D.) (https://catalog.uidaho.edu/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-phd)
• Geological Engineering (M.S.) (https://catalog.uidaho.edu/colleges-related-units/engineering/civil-environmental-engineering/geological-engineering-ms)