DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Civil and Environmental Engineering consists of the application of scientific principles to the design of public and private works that constitute the infrastructure for human populations. From a historical aspect, the pyramids of Egypt, the water resources systems that supported the agricultural society of ancient Babylonia and Assyria, the public buildings of Greece and Rome, the roads that linked the Roman Empire, and the railroads 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 building and maintaining 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 and wastewater treatment plants, dams, airports, and other constructed projects. Civil engineers may also be involved in planning for traffic controls, flood plain management, remediation of contaminated soils or groundwater, and water and air quality management. The graduates of civil engineering programs may work with consulting engineering firms, governmental agencies, construction contractors, or manufacturing industries.

In the foreseeable future, population growth and relocation should create a steady demand for infrastructure growth. The concept of environmentally sensitive and resource sustainable development is emerging as the tenet for future growth. Civil engineers will have to apply evolving technologies and develop innovative solutions to ensure wise stewardship of our limited natural resources. Students who enter civil engineering can anticipate a challenging and rewarding career.

Lower-division courses in civil engineering consist of a common core of basic courses in science, mathematics, and engineering required of most students within the college. Required course work in the junior and senior years provides the student with a broad background in civil engineering subjects while technical electives permit some specialization at the undergraduate level. For civil engineering students interested in geology, there is an option to complete a minor in Geologic 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 three graduate degree programs in civil engineering:

1. Master of Science (30 credits, with thesis),
2. Master of Engineering (33 credits, non-thesis), and
3. Doctor of Philosophy.

It also offers the Master of Science in Geological Engineering (both thesis and non-thesis options). Course work requirements in each of the 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. Students interested in graduate studies should select a specialty area in which they wish to study. Foreign students must have a TOEFL score of at least 550 for admission to any departmental graduate degree program. We do not currently require the GRE.

Graduate study is offered with specialization in environmental engineering, structures and structural mechanics, highway and pavement materials, geotechnical engineering, transportation, hydraulics, ecohydrology and water resources, and geological engineering. Interdisciplinary programs of study are encouraged for interested students. As examples, students specializing in environmental engineering may do considerable work in chemical engineering or microbiology, while specialization in geotechnical engineering may involve study in geology.

The mission of the Department of Civil and Environmental Engineering is to provide a high quality education at both the undergraduate and graduate level, emphasizing the needs of Idaho and the region. 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. capable of designing and describing civil 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.

Additionally, the department is committed to:

1. maintaining experienced, professional instructors (all are licensed professional engineers), modern facilities, and close interaction between the department and the professional engineering community in Idaho,
2. extending the knowledge base in civil engineering through research, continuing education, technology transfer, and professional practice

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, www.abet.org (http://www.abet.org).

Majors

• Civil Engineering (B.S.C.E.) (https://catalog.uidaho.edu/archive/2018-2019/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-bsce)

Minors


Civil and Environmental Engineering Graduate Program

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

• Civil Engineering (M.S.) (https://catalog.uidaho.edu/archive/2018-2019/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-ms)
• Civil Engineering (M.Engr.) (https://catalog.uidaho.edu/archive/2018-2019/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-mengr)
• Civil Engineering (Ph.D.) (https://catalog.uidaho.edu/archive/2018-2019/colleges-related-units/engineering/civil-environmental-engineering/civil-engineering-phd)
• Geological Engineering (M.S.) (https://catalog.uidaho.edu/archive/2018-2019/colleges-related-units/engineering/civil-environmental-engineering/geological-engineering-ms)