Department of Civil, Construction and Environmental Engineering

Department Information

www.ndsu.edu/ccee/ (http://www.ndsu.edu/ccee/)

Undergraduate Programs of Study

- Civil Engineering (major)
- Construction Engineering (major)
- Construction Management (major)
- Environmental Engineering (major)

Graduate Programs of Study

- Civil Engineering
- Construction Management
- Environmental Engineering

Degrees Offered

- · Bachelor of Science in Civil Engineering (B.S.C.E.)
- Bachelor of Science in Environmental Engineering (B.S.Env.E.)
- Bachelor of Science in Construction Engineering (B.S.Con.E.)
- Bachelor of Science in Construction Management (B.S.Cons.M.)
- Master of Construction Management (M.Cons.M.)
- · Master of Science (M.S.) and Ph.D. in Civil Engineering
- · Master of Science (M.S.) in Environmental Engineering

Department Description

The mission of the Department of Civil, Construction and Environmental Engineering is to provide quality education to prepare nationally competitive undergraduate students for a successful career in civil and environmental engineering; to provide advanced skills and knowledge in state-of-the-art research and design in sub-areas of civil and environmental engineering for graduate students; and to provide service to the university, engineering profession, and the public.

The following program educational objectives are consistent with the university, college, and department missions. Graduates of our undergraduate programs are expected within a few years of graduation to:

- · Engage successfully in the practice of engineering to solve current and emerging problems.
- Conduct design in a manner that is ethical, includes diverse perspectives, and realizes the broader societal and sustainability implications of the design and decision-making process.
- · Ascend to leadership roles within the workplace via initiative and responsible stewardship
- Advance their profession and communities through collaborative work, professional licensure, advanced degrees, lifelong learning, and engaged service

Civil engineering includes the planning, design, construction, maintenance, and operation of large and permanent projects of our civilization. Civil engineers are in demand wherever people need solutions to infrastructure problems. The major subdivisions of civil engineering at NDSU are structural, geotechnical, environmental, water resources, and transportation engineering. Civil Engineers are responsible for such projects as bridges, buildings, dams, and other river and harbor work, municipal water supply and sanitation facilities, streets, highways, and other transportation facilities. On many projects, civil engineers work in close cooperation with engineers and scientists from other fields. The Bachelor of Science degree in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Environmental engineering includes the integration and application of biological, chemical, and engineering principles to improve and sustain the environment for the protection of its ecosystems, human health, and environmentally-related enhancement of our quality of life. Environmental engineers focus on water and wastewater treatment system design and public health protection; traditional and emerging contaminant mitigation in water, soil, and air; ecological principles in the design process; green manufacturing; and, sustainable design. The Bachelor of Science degree in Environmental Engineering began accepting students in fall 2020.