



CIVIL & ENVIRONMENTAL ENGINEERING

CIVIL AND ENVIRONMENTAL ENGINEERS DESIGN, CONSTRUCT AND MANAGE THE ESSENTIAL FACILITIES, SYSTEMS AND STRUCTURES AROUND US.

QUICK FACTS

With aging infrastructure, rising water needs, and pressing global-scale environmental issues, the demand for civil and environmental engineers is expected to skyrocket in coming years.

90% of UW CEE majors pass the Fundamentals of Engineering (FE) exam on their first attempt.

75% of CEE students participate in at least 1 internship prior to graduation.

The CEE Department offers an annual career fair that connects students with over 70 employers

WHAT DO CIVIL AND ENVIRONMENTAL ENGINEERS DO?

Civil engineers plan, design, construct and manage public and private infrastructure and facilities. Environmental engineers explore emerging issues related to climate change, new energy resources, and sustainability.

From transportation to water quality to earthquake resilience, civil engineering students receive a solid foundation in the discipline with the ability to select a specialty for senior year upper-division coursework.

For students who want to focus on environmental engineering, students gain a deep understanding of the interactions among natural and human systems to develop innovative solutions to address environmental challenges.

WHAT PROBLEMS ARE CIVIL AND ENVIRONMENTAL ENGINEERS TRYING TO SOLVE?

UW CEE students are preparing to take on the challenges presented by aging national infrastructure and the pressing needs of both urban and developing communities around the globe. Civil and environmental engineers design, build, operate and maintain urban environments to improve people's lives.

- How can we develop efficient and selective methods to remove contaminants from air, water, contaminated soils and sediments, and decrease the amount and adverse effects of wastes?
- How can we ensure that our buildings and infrastructure can sustain earthquakes and stand up to tsunamis?
- How can we develop transportation planning that can provide for the safe, efficient, rapid, comfortable, convenient, economical, and environmentally compatible movement of people and goods?
- How can we predict and prevent geotechnical disasters such as landslides?

WHERE DO CEE ALUMNI WORK?

Air and space

Aircraft structural analysis | Boeing, CH2M Hill, Department of Defense

Computing, data and digital technologies

Mathematical modeling, transportation data and technology, smart cities, big data, remote sensing | Amazon, Google, Uber, Zillow

Environment, sustainability and energy

Climate change, renewable energy, water treatment, climate impact planning | Environmental engineering consulting firms; regional, state and federal agencies; Utility agencies

Health and medicine

Drinking water treatment, air pollution control, ecology | Aspect Consulting, Clean Air Agencies, DOW Chemical, PACE

Infrastructure, transportation and society

Project management, sustainable construction, construction technology, risk assessment, structural design, earthquake engineering, transportation design, traffic management and safety, urban planning | AMEC, GeoEngineers, Hart Crowser, Kiewit, Perteet, Sound Transit, Walsh, WSDOT

Robotics and manufacturing

Construction materials, large-scale 3D printing

CAPSTONE PROJECTS

CEE majors participate in a capstone design project in their senior year.

These team-oriented design projects prepare students for entering the workforce by simulating real engineering design projects.

Capstone teams collaborate with industry professionals.

Topics include: construction, transportation, structures, geotechnical engineering, environmental engineering, hydrology.

WHAT MAKES CEE SPECIAL?

Students in both of CEE's undergraduate programs, the Bachelor of Science in Civil Engineering (BSCE) and the Bachelor of Science in Environmental Engineering (BSENVE), experience education in a close-knit, cohort model.

Students from both programs have the opportunity to hone their skills through a variety of clubs and organizations for future engineers. CEE is the home to more than 15 student-led activities and organizations. CEE also offers multiple faculty-led study abroad opportunities. These include Engineering Rome, Engineering Jordan, and the Grand Challenges Impact Lab in Bangalore, India.

HOW CAN I LEARN MORE?

If you think the BSCE or BSENVE program might be for you, there are many opportunities to explore more:

- Take a CEE class such as CEE 103: Engineering for Natural and Human Caused Disasters (SPR20).
- Join one of CEE's many student organizations or apply to attend one of our study abroad programs.
- Explore research projects happening in CEE.

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University of Washington Civil and Environmental Engineering