

# Civil and Environmental Engineering



The civil and environmental engineering program offers a world class education informed by cutting-edge research that provides students the tools to tackle key problems of the 21st century and become leaders in their fields. It teaches the design of infrastructure systems essential for human well-being and economic activity, studies the complex and dynamic interactions between the natural and built environment, and strives to engineer a healthier, more sustainable, resilient and equitable world.

## DEGREES OFFERED

M.S. & Ph.D.

## HIGHLIGHTS

- Instruction and interdisciplinary research with internationally recognized academics developing advanced knowledge and sought-after engineering skills
- Financial support through competitive fellowships and assistantships
- Dedicated mentoring, academic and career development, and professional networking

## FOCUS AREAS

- **Structures, Geotechnics and Materials Engineering** – includes above- and sub-surface structure and infrastructure design, natural hazard engineering, sustainable and energy efficient construction, engineering mechanics, novel materials, multiscale materials modeling, advanced manufacturing, reliability and risk assessment
- **Transportation Systems Engineering** – includestraffic operations and management; travel behavior; smart city technology applications; freight and logistics; micromobility; energy; air quality and health; e-commerce; and policy and equity analysis
- **Hydrology and Water Resources Engineering** – includes hydrometeorology, remote sensing, computational fluid dynamics, climate change, water resource management, natural hazards and their societal impacts
- **Environmental and Energy Systems** – includes transport processes, water and air quality, treatment systems, energy systems, chemical and biological processes, coastal processes, fire science, carbon storage and sustainability
- **Master's of Engineering (M.Eng) in CEE** - includes aspects of sustainable infrastructure design and data science methods in CEE as well project and people management training.

## LIVING AT UCI

- UCI ranked in the top 10 public universities by U.S. News & World Report seven years in a row
- Irvine named safest city in the U.S. for 16 consecutive years
- Social engagement: student governance, clubs (CEEGA, ITE, Reframing CEE), and competitions (e.g., OC Sustainability Decathlon)
- On-campus residential housing
- Outdoor activities: 15 minute drive from the beach and 1.5 hours from ski resorts, easy access to hundreds of biking and hiking trails
- Culture and arts: Segerstrom Center for the Arts, Disneyland, the Getty Museum and the Broad Museum

## ADMISSIONS

Students with strong quantitative and analytical skills from a variety of backgrounds are encouraged to apply. Applicants should have a B.S. degree with a grade point average of 3.0 or greater and have taken a set of fundamental engineering courses.

## LEARN MORE!

