

# Master of Engineering in Civil and Environmental Engineering

The Master of Engineering (M.Eng) in CEE program at UCI is a valuable asset **employers seeking to prepare future leaders** for rapidly growing trends in civil and environmental engineering practice. With both **pragmatic technical and management components**, graduates will obtain the skills to help navigate your organization into the sustainable, data-driven future in **just 9 months**.

## Sustainable Infrastructure: Reducing Environmental Impact

With a focus on reducing greenhouse gas emissions and resource consumption, the Sustainable Infrastructure courses equip engineers to understand and assess environmental impacts. Students will apply sustainability assessment tools to real projects, aiding clients in meeting emissions reduction goals and complying with environmental policies.

## Data Science in CEE: Improving Infrastructure Performance

The Data Science courses provide students with essential programming and data analytics skills. Students will analyze large datasets and apply them within engineering contexts. This will allow them to harness ever improving sensing and monitoring capabilities to reduce costs, promote increased system reliability, and reduce environmental impacts.

## Curriculum Overview

Fall	Winter	Spring
Eng. Leadership & Management	Eng. Leadership & Management	Eng. Leadership & Management
Tech. Course	Tech. Course	Tech. Course
Tech. Course	Tech. Course	Tech. Course
ProSeminar	ProSeminar	ProSeminar
	Capstone Proj.	Capstone Proj.

→ Mon. 6:00 pm



Schedule considers working professionals with evening courses and hybrid offerings.

→ Wed. 1:00 pm (Full-time professionals can opt out)

→ Coordinated with Project Industry Sponsors

EXPLORE THE CURRICULUM



LEARN MORE

# Elevate Your Engineers Boost Your Competitive Edge M.Eng in CEE@UCI

## Goals of the M.Eng CEE

### Sustainable Infrastructure

To better prepare the CEE workforce to meet the increasing demand in emissions assessment and sustainable design in civil infrastructure, this curriculum provides students with the following relevant skills:

- Understand and assess greenhouse gas emissions and other environmental impacts associated with civil infrastructure design and operation choices
- Pragmatic experience applying assessment tools to real examples such as the design and operation of buildings, transportation systems, and organizational supply chains.
- Ability to add value for clients and/or their own organizations that are seeking to better comply with policy goals or efforts to reduce greenhouse gas emissions and other environmental impacts.

### Data Science in Civil and Envir. Eng.

To better equip the CEE workforce to provide value in a growing environment of large data sets from higher resolution monitoring of infrastructure, this curriculum provides students with the following relevant skills:

- Analyze and gain insights from large data sets associated with the performance of civil infrastructure
- Apply data analytics skills within the context of domain-specific engineering knowledge
- Identify optimizations to reduce costs, improve reliability, and reduce environmental impacts associated with civil infrastructure

**Students can customize coursework and take courses outside these areas with academic approval.**

## FAQ

### Who is this program for and how does the M.Eng differ from the M.S.?

Unlike a M.S., the M.Eng is a true 1 academic year program for working professionals, and new graduates, seeking to accelerate their careers through a curriculum strongly connected to CEE practice. The curriculum is focused on developing and applying skills needed to address important practical applications and not on training for academia. Expert practitioners will teach key M.Eng courses and students will work closely with Industry Sponsors on Capstone design projects. Further, the M.Eng features courses in technical project and people management skills.

### How much does this program cost and are there any opportunities for financial aid?

Total cost for the current cohort is ~\$50,000 or **around \$45,000 without UCI health insurance. Fellowships of up to \$15,000 are available** for top applicants.

## Benefits for Your Engineers Are Clear

**Skill Enhancement:** Equip your engineers with the expertise to assess and reduce environmental footprint and harness large data sets for infrastructure improvements.

**Leadership Development:** Graduates are not just engineers; they are future leaders who can steer projects with a profound understanding of sustainability, emissions assessment, and data-driven insights.

**Cost Efficiency Opportunities:** Skilled engineers can identify optimizations that reduce costs, enhance reliability, and mitigate environmental impacts, thereby benefiting the company's bottom line.

**Competitive Advantage** By investing in this program, employers ensure that their engineers are at the forefront of industry trends, giving their company a distinct competitive advantage.

**Meet your sustainability goals. Leverage your data. Have your engineers apply today.**