Master of Engineering in Civil and Environmental Engineering (M.Eng CEE)



The Master of Engineering (M.Eng) in CEE program at UCI is a valuable asset for employers seeking to prepare their 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 Track: Reducing Environmental Footprint

With a focus on curbing greenhouse gas emissions and resource consumption, the Sustainable Infrastructure track equips 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 Track: Improving Infrastructure Performance

Our Data Science in Civil and Environmental Engineering track provides engineers with essential data analytics skills. They can analyze large datasets and apply them within engineering contexts, harnessing enhanced sensing and monitoring capabilities leading to cost reduction, increased reliability, and reduced environmental impact.

Curriculum Overview

FULL CURRICULUM Winter Spring Fall Eng. Leadership & Eng. Leadership & Eng. Leadership & ► Mon. 6:00 pm **Management Management** Management Tech. Course Tech. Course Tech. Course Schedule considers working professionals with evening courses and hybrid offerings. Tech. Course **Tech. Course** Tech. Course → **Wed.** 1:00 pm (Full-time professionals can opt out) **ProSeminar** ProSeminar **ProSeminar** Capstone Proj. Capstone Proj. → Coordinated with Project Industry Sponsors



UCI Samueli School of Engineering Department of Civil and Environmental Engineering

EXPLORE THE

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





Department of Civil and Environmental Engineering

Goals of the M.Eng CEE tracks

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:

- The ability to understand and assess greenhouse gas emissions and other environmental impacts associated with civil infrastructure design and operation choices.
- Pragmatic experience in applying assessment tools to real examples such as the design and operation of buildings, transportation systems, and organizational supply chains.
- Ability to deliver 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 from higher resolution monitoring of infrastructure, this curriculum provides students with the following relevant skills:

- The ability to analyze and gain insights from large datasets associated with the performance of civil infrastructure.
- The ability to apply data analytics skills within the context of domain-specific engineering knowledge.
- The ability to identify optimizations to reduce costs, improve reliability, and reduce environmental impacts associated with civil infrastructure.

Students can customize coursework, combining courses from each track, with academic approval.

FAQ

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

The M.Eng is designed as a true 1-year full-time program for full-time working professionals, and new graduates, seeking to develop their careers through curriculum strongly connected with CEE practice. A traditional MS is not. Key courses are taught by practicing experts and students work closely with Industry Sponsors on their CapStone design projects. The curriculum is focused on developing and applying skills needed to address important practical applications not fundamental theory required for work in academia. Further, the M.Eng program focuses on project and people management skills for engineering teams and projects.

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

Total cost for the current cohort is \$50,321 or around \$45,000 without UCI health insurance and fellowships of up to \$15,000 are available for top applicants. Apply before Dec. 15, 2023 for priority!

Benefits for Your Engineers Are Clear

Skill Enhancement: Equip your engineers with the expertise to assess and reduce environmental footprint and harness large data 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.