CIVIL ENGINEERING AT THE UNIVERSITY OF HOUSTON

The civil engineering graduate program at the University of Houston Cullen College of Engineering equips students with the extensive background necessary for practicing professional civil engineering in industry. The curriculum is focused on design, construction, management and operation to enable graduates of the program to cope with and solve current and future grand challenges facing the civil engineering field.

We are re-envisioning infrastructure from structural, geotechnical, environmental, mechanics, and geosensing and hydrosystems perspectives to improve America’s Infrastructure Report Card. Our academic programs enable specialization in any of these domains and across disciplines.
RESEARCH EXCELLENCE

The faculty in the Department of Civil and Environmental Engineering at the University of Houston have expertise in environmental engineering, geosensing, geotechnical and materials engineering, structural engineering as well as water resources and fluid mechanics.

Graduate students have the chance to study and perform research in some of the best-equipped laboratories in the United States and be advised by professors of international reputation.

The majority of the research performed at the University of Houston, and in most large universities, is funded by outside agencies, such as the National Science Foundation, Texas Department of Transportation, U.S. Environmental Protection Agency, Water Environment Research Foundation, American Water Works Research Foundation, Gulf Coast Hazardous Substance Research Center, the City of Houston, Texas Higher Education Coordinating Board, Texas Natural Resources Conservation Commission, the American Petroleum Institute, and the Minerals Management Service. Projects have also been funded from industrial sources such as Montgomery Watson America’s Inc., Exxon, and many others.

Innovation and entrepreneurial efforts are huge points of pride at the Cullen College. Faculty support students to help bring their groundbreaking ideas from the lab to the market. One recent company to come out of the civil engineering program is Sensytec, which uses “smart” cement to improve infrastructure. The majority of UH-based companies are housed at the Technology Bridge. Learn more at: innovation.uh.edu/technology-bridge

FACULTY EXPERTISE

Our award-winning faculty are constantly performing cutting-edge research, and are always seeking hard-working graduate researchers to join them in their labs.

Available research areas in the Civil and Environmental Engineering Department include environmental studies, geosensing, geotechnics and materials, hydrosystems, infrastructure and mechanics.

To view a full list of faculty by research area, please visit: www.cive.uh.edu/research/faculty-expertise

FACILITIES & LABORATORIES

Located in Engineering Buildings 1 and 2, Durga D. & Sushila Agarwal Engineering Research Building (AERB), Science Engineering Research Center (SERC), South Park Annex, and Technology Bridge, our faculty have built state-of-the-art research laboratories. Some of our noteworthy research facilities and laboratories include:

- Thomas Hsu Structural Research Laboratory
- UH Hydraulics Laboratory
- Environmental Fluid Mechanics Lab
- Computational and Applied Mechanics Laboratory
- Shaffer Lab (Dr. Devin Shaffer - NSF CAREER Award winner 2021)

Learn more at: www.cive.uh.edu/research/facilities-laboratories

CENTERS & CONSORTIA

Collaborations with industry and both internal to UH and Engineering and external research enterprises is a tenet of our Department. The faculty lead and participate in the following centers and consortia:

- National Center for Airborne Laser Mapping (NCALM)
- Hurricane Resilience Research Institute (HuRRI)
- Center for Innovative Grouting Materials and Technology (CIGMAT)
- Severe Storm Prediction, Education & Evacuation from Disasters (SSPEED)
- UH Coastal Center

GRADUATE DEGREES OFFERED

The UH Cullen College of Engineering offers M.S. non-thesis, M.S. thesis and Ph.D. degrees in civil engineering. Students have the option of taking some civil engineering courses online.

FOR MORE INFORMATION

For more information on eligibility and admission requirements, please visit www.cive.uh.edu/programs/civil-graduate