CIVIL & ENVIRONMENTAL ENGINEERING:

ENGINEERING OUR STRUCTURES, INFRASTRUCTURE AND ENVIRONMENT

WHAT IS CIVIL ENGINEERING?

Civil engineering is the professional discipline that focuses on the development and maintenance of both man-made and natural infrastructure. Civil engineers produce the facilities on which modern life depends, including roads, bridges, buildings, offshore structures, airports and levees, as well as the infrastructure required for the supply of clean water.

Civil engineering includes a multitude of sub-disciplines including structural engineering, environmental engineering, geotechnical engineering, water resources engineering, geosensing systems engineering, and others. Civil engineering offers a very wide variety of opportunities!

CAREERS IN CIVIL ENGINEERING

Civil engineers find employment opportunities in both the private and public sectors. Career opportunities in civil engineering are excellent – especially in Houston, the Energy Capital of the World. Employment for civil engineers is expected to increase significantly, spurred by ongoing emphasis to improve our nation's infrastructure.

A 2017 salary survey produced by the National Association of Colleges and Employers found that new civil engineering graduates earned an average starting salary of $63,563.

WHY EARN YOUR CIVIL ENGINEERING DEGREE AT THE UNIVERSITY OF HOUSTON?

ACADEMICS

The civil engineering undergraduate program at the University of Houston Cullen College of Engineering is rigorous and hands-on. The program is designed to offer undergraduate students a broad-based education in the freshman and sophomore years and a more focused education in the junior and senior years. The jobs available in the field of civil and environmental engineering are diverse, so a broad base is provided to prepare graduates for a variety of positions. Luckily, the civil and environmental engineering department has one of the most loyal and active alumni bases in the entire college, with UH civil engineering graduates employed in top positions throughout the region – so landing your dream job, internship, co-op or fellowship shouldn't be too difficult!

Learn more at www.cive.uh.edu/programs/undergraduate

UNIVERSITY of HOUSTON | ENGINEERING

RESEARCH

The civil engineering undergraduate program at the University of Houston Cullen College of Engineering is well-known for its research, and faculty in the department have expertise in environmental engineering, geotechnical and materials engineering, structural engineering, oceans and water resources engineering and geosensing systems engineering. The civil and environmental engineering department is also home to the world-famous National Center for Airborne Laser Mapping (NCALM), which was recently featured in international media for finding a fabled ancient city in Honduras. Undergraduate students have the opportunity to become involved in the fascinating research being conducted by faculty members and graduate students in the department.

Learn more at www.cive.uh.edu/research/overview

SCHOLARSHIPS

Departmental scholarships include the Cobb/Fendley Endowed Scholarship, R. P. Doss Houston Contractors Association Scholarship, Jesse G. Gonzalez Scholarship Endowment, The Klotz Associates, Inc. Scholarship, Herbert and Faye Lum Scholarship, The Structural Consulting Company/Monteith Scholarship, Jimmie A. Schindewolf Academic Scholarship, American Concrete Institute Scholarship and others. Scholarships are also awarded by the Cullen College of Engineering and by the University of Houston Office of Scholarships and Financial Aid. Additionally, the university's internship program allows students to receive career training while financing their education.

Learn more at www.cive.uh.edu/programs/undergraduate/scholarships

STUDENT ORGANIZATIONS

Students are encouraged to join academic and professional organizations to build leadership, communication and networking skills. Members of student organizations receive career guidance from engineering professionals and participate in activities that promote engineering.

The civil and environmental engineering department has student chapters of the American Society of Civil Engineers (ASCE), the American Concrete Institute (ACI) and the Chi Epsilon Civil Engineering Honor Society. The UH ASCE chapter is very active, and its members are engaged in the Concrete Canoe and Steel Bridge Competitions each year.

Learn more at www.cive.uh.edu/programs/undergraduate/student-activities

FOR MORE INFORMATION

UH Department of Civil and Environmental Engineering: www.cive.uh.edu
Undergraduate Program: www.cive.uh.edu/programs/undergraduate
Email: civil@egr.uh.edu

UH Department of Civil and Environmental Engineering
Engineering Building 1 | 4726 Calhoun Rd., Suite N107
Houston, Texas 77204-4003 | 713.743.4250

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

FOUR-YEAR ACADEMIC MAP 2018-2019

YEAR 1

SEMESTER 1			SEMESTER 2			Total
ENGI 1100	Introduction to Engineering	1	CHEM 1332	Fundamentals of Chemistry II	3	
CHEM 1331	Fundamentals of Chemistry	3	CHEM 1112	Fundamentals of Chemistry Lab II	1	
CHEM 1111	Fundamentals of Chemistry Lab	1	ENGI 1331	Computing for Engineers	3	
ENGL 1303	First Year Writing I	3	ENGL 1304	First Year Writing II	3	
MATH 1431	Calculus I	4	MATH 1432	Calculus II	4	
CORE	Social and Behavioral Sciences	3	PHYS 1321	University Physics I	3	
	Semester Hours	**15**		**Semester Hours**	**17**	**32**

YEAR 2

SEMESTER 1			SEMESTER 2			
GEOL 1330	Physical Geology	3	MECE 3336	Mechanics II (Dynamics)	3	
or BIOL 1361	Intro to Biological Science		CIVE 2332	Mechanics of Solids	3	
CIVE 2330	Mechanics I (Statics)	3	INDE 2333	Engineering Statistics I	3	
MATH 2433	Calculus III	4	ENGI 2304	Technical Communications	3	
MECT 3341	Computer-Aided Drafting I	3	MATH 3321	Engineering Mathematics	3	
PHYS 1322	University Physics II	3	POLS 1336	U.S. and Texas Constitutions and Politics	3	
	Semester Hours	**16**		**Semester Hours**	**18**	**34**

YEAR 3

SEMESTER 1			SEMESTER 2			
CIVE 3331	Environmental Engineering	3	CIVE 3434	Fluid Mechanics and Hydraulic Engineering	4	
CIVE 3332	Engineering Materials	3	CIVE 4363	Concrete Design	3	
CIVE 3337	Structural Analysis	3	CIVE 4369	Foundation Engineering	3	
CIVE 3339	Geotechnical Engineering	3	CIVE ELEC	Civil Engineering Elective	3	
MECE 2334	Thermodynamics	3	CIVE ELEC	Civil Engineering Elective	3	
POLS 1337	U.S. Government	3				
	Semester Hours	**18**		**Semester Hours**	**16**	**34**

YEAR 4

SEMESTER 1			SEMESTER 2			
CIVE 4332	Hydrology	3	CIVE 4312	Civil Engineering Design Project	3	
CIVE 4333	Water & Wastewater Treatment	3	CIVE ELEC	Civil Engineering Elective	3	
CIVE 4311	Professional Practice in Civil Engr.	3	CIVE ELEC	Civil Engineering Elective	3	
HIST 1376/77	The United States to 1877	3	CORE	Creative Arts	3	
CORE	Language, Philosophy & Culture	3	HIST 1378/79	The United States Since 1877	3	
	Semester Hours	**15**		**Semester Hours**	**15**	**30**
				TOTAL SEMESTER HOURS		**130**

**Students should meet with their academic advisor to formulate their own plan. Course offerings are subject to change.*

FAST FACTS

- **263** — TOTAL UNDERGRAD STUDENTS IN CEE DEPARTMENT
- **$63,563** — AVERAGE STARTING SALARY WITH B.S. IN CIVIL ENGINEERING
- **22** — TOTAL FACULTY IN CEE DEPARTMENT
- **138** — TOTAL FACULTY IN CULLEN COLLEGE
- **22:1** — STUDENT-TO-FACULTY RATIO ACROSS THE UNIVERSITY