BACHELOR OF SCIENCE IN CONSTRUCTION ENGINEERING

WHAT IS CONSTRUCTION ENGINEERING?

The BS in Construction Engineering program combines civil engineering and business principles to produce graduates who can design and manage the construction processes that create and rehabilitate the public infrastructure. This includes design and construction of commercial buildings, airports, dams, roads, utilities, bridges, residential communities and schools.

CAREERS IN CONSTRUCTION ENGINEERING

Employment opportunities for construction engineers are available in both the private and public sectors. Main responsibilities for this career track include on-site management and observation of construction projects, and fostering strong business-client relationships to ensure these projects are completed meeting budget and timeline requirements.

According to a 2022 salary survey produced by Payscale.com, a construction engineer can expect to earn a starting salary of \$70,412, with that climbing closer to \$80,000 after a few years of accrued experience.

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

ACADEMICS 🥏

The construction engineering undergraduate degree program is a part of the Department of Civil and Environmental Engineering. Construction engineering undergraduates will take all of their major coursework at UH at Katy, located near the Grand Parkway & I-10, in Katy, Texas.

Overall, expect this program to be rigorous and hands-on. Luckily, this department has one of the most loyal and active alumni bases in the entire college, with graduates employed in top positions throughout the region – so landing your dream job, internship, co-op or fellowship shouldn't be too difficult!

RESEARCH 🎍

The civil & environmental engineering department 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 NSF-funded National Center for Airborne Laser Mapping (NCALM). 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

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 a strong student chapter of the American Society of Civil Engineers (ASCE). The UH ASCE chapter engaged in the Regional Concrete Canoe Competition and Steel Bridge Competition each year.

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

ABOUT UH AT KATY ★

The UH at Katy instructional site is an official part of the UH central campus. Completed in Fall 2019, the three-story, 80,000-square-foot-facility houses numerous programs from the UH Cullen College of Engineering, and is home to the prestigious Subsea Engineering graduate program— the first of its kind in the nation. Computer Engineering & Analytics, Systems Engineering and Construction Engineering are exclusively offered at UH at Katy.

UH at Katy is also one of the sites of the UH/HCC Engineering Academy. The UH/HCC Engineering Academy is a partnership with Houston Community College (HCC) where students are co-enrolled at both institutions. Students who are interested in computer engineering and analytics, systems or construction engineering and would like to complete all four years of their degree in the Greater Katy Area, may want to consider the cost-effective opportunities that the UH/HCC Engineering Academy has to offer. UH at Katy is located near the Grand Parkway & I-10, in Katy, Texas. Learn more at https://www.egr.uh.edu/engineering-academies/hcc

CEE FAST FACTS 🗹

- **390** Total Undergrad Students in Department
- 208 Total Faculty in Cullen College
- \$70,412 Average Salary
- 21:1 Student-to-Faculty Ratio Across the University



BACHELOR OF SCIENCE IN CONSTRUCTION ENGINEERING

ILLUSTRATIVE FOUR-YEAR ACADEMIC PLAN

YEAR 1

YEAR 2

YEAR 3

SEMESTER 1			SEMESTER 2			Total
ENGI 1100	Introduction to Engineering	1	CHEM 1312	Fundamentals of Chemistry 2*	3	
CHEM 1311	Fundamentals of Chemistry*	3	CHEM 1112	Fundamentals of Chemistry 2 Lab	1	
CHEM 1111	Fundamentals of Chemistry Lab	1	ENGI 1331	Computing for Engineers	3	
ENGL 1301	First Year Writing I*	3	ENGL 1302	First Year Writing II*	3	
MATH 2413	Calculus I*	4	MATH 2414	Calculus II*	4	
GOVT 2305	US & Texas Constitution and Politics*	3	PHYS 2325	University Physics	3	

Semester Hours 15

Semester Hours 17

SEMESTER 1			SEMESTER 2			
INDE 2333	Engineering Statistics I	3	CIVE 2332	Mechanics of Solids	3	
ENGR 2301	Mechanics I	3	CNE 2211	Construction Engineering Fundamentals	2	
MATH 2415	Calculus III	4	INDE 3333	Engineering Economy	3	
GOVT 2306	US Government*	3	ENGI 2304	Technical Communications	3	
PHYS 2326	University Physics II	3	MATH 3321	Engineering Mathematics	3	
			CORE	Social & Behavioral Science*	3	

Semester Hours 16

SEMESTER 1			SEMESTER 2			
CNE 3311	Construction Engineering Equipment & Methods	3	CNE 3301	Construction Safety Engineering	3	
CNE 3310	Construction Scheduling Planning & Control	3	CNE 3321	Construction Engineering Management	3	
CIVE 3332	Engineering Materials	3	CNE 3322	Legal Aspects of Construction Engineering	3	
CIVE 3337	Structural Analysis	3	CNE 3333	Building Information Modeling	3	
INDE 3330	Financial & Cost Management	3	CNE ELEC	Construction Engineering Elective	3	
CIVE 3380	Surveying	3				
	Semester Hours	18		Semester Hours	15	33

YEAR 4

SEMESTER 1			SEMESTER 2			
CIVE 4311	Professional Practice in Civil Engr	3	CNE 4312	Construction Engineering Design Project	3	
CNE 4321	Construction Engineering Estimating	3	CNE ELEC	Construction Engineering Elective	3	
CNE ELEC	Construction Engineering Elective	3	CNE ELEC	Construction Engineering Elective	3	
HIST 1301	The United States to 1877*	3	HIST 1302	The United States Since 1877*	3	
CORE	Language, Philosophy & Culture*	3	CORE	Creative Arts*	3	
	Semester Hours	15		Semester Hours	15	30
				TOTAL SEMESTER HOU	JRS	128

*State of Texas Core Curriculum; All Major Courses will be taken out of the UH at Katy building; Students should meet with their academic advisor to formulate their own plan.

FOR MORE INFORMATION

Get in touch with us and schedule a virtual or in person meeting: https://www.egr.uh.edu/academics/undergraduate-programs UH Department of Civil and Environmental Engineering: www.cive.uh.edu

Undergraduate Program: www.cive.uh.edu/programs/undergraduate | Email: civil@egr.uh.edu

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