BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

WHAT IS CONSTRUCTION MANAGEMENT?

Construction Management (CM) is a dynamic profession focused on planning, coordinating, and overseeing construction projects from inception to completion. This discipline integrates elements of construction, project management, architecture, and engineering to guarantee the successful and efficient execution of building and infrastructure projects. Construction managers operate across diverse settings, including residential, commercial, industrial, and civil engineering projects. Their pivotal role is to ensure projects are delivered on time, within budget, and to the client's satisfaction, all while upholding rigorous standards of quality and safety.

CAREERS IN CONSTRUCTION MANAGEMENT

Construction management students at the University of Houston (UH) Cullen College of Engineering's Technology Division will be prepared for careers in the construction industry and graduate school, including construction manager, project manager, superintendent, field engineer, scheduler, estimator, and project controls specialist. The Cullen College of Engineering also has a dedicated Engineering Career Center which connects hundreds of students each year to internships and full-time positions.

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



Construction management undergraduates' students at the Cullen College of Engineering's Technology Division are taught the knowledge and skills that are valued, sought, and meet the demands of the construction industry. The commercial, industrial, and highway/heavy sectors of the construction industry actively seek well-prepared entrylevel professionals who possess both knowledge and practical skills.

Our CM students gain expertise in construction materials and methods, structural systems, soil site development, business, and contract administration. They also develop critical skills in project planning, estimating, scheduling, and performance evaluation. The curriculum integrates fundamental and advanced coursework, staying current with industry standards and technology for effective construction management. Students are introduced to essential software applications, preparing them for the practical use of computer tools in construction management.

The Construction Management program offers flexibility for students to tailor their education to match their interests and career goals. Students can choose between the commercial construction track or the process and industrial management track to ensure they are wellprepared for their desired career paths. Learn more at https://dot.egr. uh.edu/programs/undergraduate/construction-management

RESEARCH 湰

The annual research expenditure reached a record high of \$500,000, marking an impressive growth of 225% over the past three years. This significant increase is attributed to numerous grants from federal and state agencies, as well as global corporations.

SCHOLARSHIPS 🖈

Merit-based scholarships are awarded by the Cullen College of Engineering's Technology Division. Scholarships are also offered by the UH Office of Scholarships and Financial Aid. Additionally, the university's co-op program offers students the opportunity to receive career training while financing their education. Learn more at https:// dot.egr/uh.edu/advising/financial-aid/scholarships.

STUDENT ORGANIZATIONS 🕮

Students are urged to participate in academic and professional groups to enhance their leadership, communication, and networking abilities. Joining these organizations offers career advice from industry experts and involvement in activities that enrich their academic focus. At the Cullen College of Engineering's Technology Division, organizations such as the Associated Builders and Contractors, the Associated General Contractors of America, and Women in Construction cater to students keen on pursuing careers in construction. Membership provides a platform to connect with professionals, faculty, and peers across all undergraduate levels.

CM FAST FACTS 🗹

660 Total Undergraduate Students31 Total Faculty

\$77,650.00* Average Salary

33:1 Student-to-Faculty Ratio Across the University

* https://www.bls.gov/oes/current/oes_nat.htm#47-0000



BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT YEAR 1

FOUR-YEAR ACADEMIC MAP 2023-2024

SEMESTER 1 SEMESTER 2 CNST 1330 or Graphics I OR Project Drawings & CNST 1301 or **Construction Materials & Methods** 3 3 Graphics CNST 1325 **OR Process & Industrial Construction** CNST 1315 CNST 1361 Construction Management I MATH 2312 Precalculus 3 3 Finite Math w/ Applications **US Government** MATH 1324 GOVT 2305 3 3 HIST 1301 U.S. to 1877 HIST 1302 U.S. since 1877 3 3 First Year Writing I First Year Writing II ENGL 1301 ENGL 1302 3 3 Semester Hours 15 Semester Hours 15 30

YEAR 2

SEMESTER 1			SEMESTER 2			Т	otal
CNST 2321 or CNST 2325	Mechanical & Electrical Systems OR Process & Industrial Subsystems	3	CNST 2341 or CNST 2345	Construction Documents or Contr OR Documents for Capital Project	ract ts	3	
MATH 2413	Calculus I	4	CNST 2351	Construction Estimating I		3	
CNST 2360	Effective Communication in Const	3	GOVT 2306	US & Texas Constitution & Politics	5	3	
ECON 2302 or ECON 2301	Principles of Micro or Macroeconomics	3	MATH 1342	Elementary Statistical Methods		3	
PHYS 1301	College Physics I	3	PHYS 1302	College Physics II		3	
	Semester Hours	16			Semester Hours	16	32

YEAR 3

SEMESTER 1			SEMESTER 2		T	otal
CNST 3301	Construction Equip & Methods	3	CNST 3331	Construction Planning & Scheduling	3	
CNST 3185	Construction Experience	1	CNST 3372	Soil Mechanics and Foundations	3	
CNST 3351 or CNST 3365	Construction Estimating II OR Cost Est. for Capital Projects	3	CNST 3205 or CNST 3210	Construction Safety Management OR Safety for Industrial Project	2	
CNST 3355/3155	Strength of Construction Materials & Lab	4	MANA 3335	Intro to Organizational Behavior & Mang	3	
ACCT 2301	Principles of Financial Acct	3	CNST 3265	Construction Layout & Site Develop	2	
			ACCT 2302	Principles of Managerial Accounting	3	
	Semester Hours	14		Semester Hours	16	30

YEAR 4

SEMESTER 1			SEMESTER 2			Tc	tal
CNST 4331 or CNST 4335	Construction Management II or Capital Projects Development	3	CNST 4341 or CNST 4385	Project Controls OR Field Operation for Capital Projects	ons	3	
CNST 4381 or CNST 4345	Reinforced Concrete & Building Codes or Reinforced Concrete Structures	3	CNST 4311 or CNST 4315	Structural Steel & Timber Construction OR Steel Constructio	on	3	
CNST 4220	Comprehensive CM & Emerging Practices	2	CNST 4302	Construction Law & Ethics		3	
BUSI 4350	Business Law & Ethics	3	CORE	Language, Philosophy & Culture		3	
Business Elective	FINA 3332, MARK 3336, SCM 3301, ENTR 3310, ENTR 3312	3	CORE	Creative Arts		3	
	Semester Hours	14			Semester Hours	15	29

TOTAL SEMESTER HOURS 120

FOR MORE INFORMATION

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

Construction Management Undergraduate Program: https://dot.egr.uh.edu/programs/undergraduate/ construction-management | Email: asc@uh.edu

UH Cullen College of Engineering Technology Division: https://dot.egr.uh.edu/

Department of Construction Management | Cullen College of Engineering, Technology Division 4230 Martin Luther King Blvd #300 | Houston, Texas 77204-4003 | 713.743.4100



(in) @UH Cullen College of Engineering - Technology Division



