



Bachelor of Science in Mechanical Engineering
 Recommended 4-Year Course Sequence
 2024-2025 Catalog



FRESHMAN YEAR

Fall					Spring				
HCC	UT Tyler	Title	HCC	UTT	HCC	UT Tyler	Title	HCC	UTT
CHEM 1311		General Chemistry I (Lecture)	3		PHYS 2325		University Physics I (Lecture)	3	
CHEM 1111		General Chemistry I (lab)	1		PHYS 2126		University Physics I (Lab)	1	
ENGR 1201	MENG 1301	Introduction to Engineering	2		ENGL 2311	ENGL 1302	Technical & Business Writing	3	
ENGL 1301		Composition I	3		ENGR 2304	EENG 3308	Programming for Engineers(Programming Languages for Design)	3	
HIST 1301		United States History I	3		ENGR 1304	MENG 1301	Engineering Graphics	3	
MATH 2413		Calculus I	4		MATH 2414		Calculus II	4	
						ENGR 1000	Thriving in Engineering		0
			16	0				17	0

SOPHOMORE YEAR

Fall					Spring				
HCC	UT Tyler	Title	HCC	UTT	HCC	UT Tyler	Title	HCC	UTT
PHYS 2326		University Physics II (Lecture)	3		MATH 2320	MATH 3305	Differential Equations	3	
PHYS 2126		University Physics II (Lab)	1		ECON 2301 (or ECON 2302)		Principles of Macroeconomic (Principles of Microeconomics)	3	
MATH 2415		Multivariate Calculus (i.e., Calculus III)	4		ENGR 2302		Engineering Mechanics: Dynamics	3	
ENGR 2301		Engineering Mechanics: Statics	3		ENGR 2305	EENG 3301	Electrical Engineering Circuits I (Lecture)	3	
	MENG 3319	Materials Science and Manufacturing		3	ENGR 2105		Electrical Engineering Circuits I (Lab)	1	
GOVT 2305	POLS 2305	Federal Government	3		MATH 2318	MATH 3203	Matrix Methods in Science and Engineering (Linear		2
			14	3				13	2

JUNIOR YEAR

Fall					Spring				
HCC	UT Tyler	Title	HCC	UTT	HCC	UT Tyler	Title	HCC	UTT
	MENG 3401	Thermodynamics		4		MENG 3316	Heat Transfer		3
	MENG 3310	Fluid Mechanics		3		MENG 3309	Mechanical Systems Design		3
ENGR 2332	MENG 3306	Mechanics of Materials		3		MENG 3211	Thermal-Fluids Laboratory		2
	MENG 3210	Experimental Measurements and Techniques		2		MENG 3303	Dynamics of Machinery		3
SPCH 1315	CMST 1315	Introduction to Public Speaking	3		PHIL 2306	PHIL 2306	Introduction to Ethics	3	
	MATH 3351	Probability and Statistics for Engineers and Scientists		3		Various	Technical Elective		3
			3	15				3	14

SENIOR YEAR

Fall					Spring				
HCC	UT Tyler	Title	HCC	UTT	HCC	UT Tyler	Title	HCC	UTT
	MENG 4215	Senior Capstone Design I		2		MENG 4216	Senior Capstone Design II		2
HIST 1302		United States History II	3		GOVT 2306	POLS 2306	Introductory Texas Politics	3	
Various		Creative Arts (Core, 3 hrs.)		3		MENG 4326	Finite Element Analysis		3
	Various	Technical Elective		3		Various	Technical Elective		3
	MENG 4312	System Dynamics and Control		3		Various	Technical Elective		3
	Various	Technical Elective		3					
			3	14				3	11

Total Credit Hours at Houston Community College		72
Total Credit Hours at UT Tyler		59
Total Credit Hours		131

Other LD courses (CORE) may either be taken at HCC or through on-line section enrollment with the MAIN Campus