

COLLEGE OF ENGINEERING

Bachelor of Science, Mechanical Engineering

Four-Year Academic Map 2026-2027

YEAR 1	Semester 1 Fall			Semester 2 Spring			Total	
	CHEM 1311	Fundamentals of Chemistry*	3	CHEM 1312	Fundamentals of Chemistry 2*	3		
	CHEM 1111	Fundamentals of Chemistry Lab	1	CHEM 1112	Fundamentals of Chemistry Lab	1		
	ENGL 1301	First Year Writing I*	3	ENGL 1331	Computing for Engineers	3		
	MATH 2413	Calculus I*	4	MATH 2414	Calculus II*	4		
	GOVT 2306	U.S. & TX Constitution & Politics*	3	PHYS 2325	University Physics I	3		
	ENGI 1100	Introduction to Engineering	1	ENGL 1302	First Year Writing II*	3		
Semester Hours			15	Semester Hours			17	32

YEAR 2	Semester 1 Fall			Semester 2 Spring			Total	
	ENGR 2301	Mechanics I	3	ENGI 2304	Technical Communications*	3		
	GOVT 2305	U.S. Government*	3	MATH 3321	Engineering Mathematics	3		
	MATH 2415	Calculus III	4	MECE 2334	Thermodynamics I	3		
	PHYS 2326	Physics II	3	MECE 3336	Mechanics II	3		
	MECE 2261	Mechanical Engineering Practicum	3	MECE 2361	Intro to Mechanical Design	3		
	CORE	Language, Philosophy & Culture*						
Semester Hours			18	Semester Hours			15	33

YEAR 3	Semester 1 Fall			Semester 2 Spring			Total	
	MECE 3338	Dynamics & Control of Mech Sys	3	CORE	American History*	3		
	MATH 3363	Intro Partial Differential Equations	3	MECE 3381	Intro to Finite Element Methods			
	MECE 3369	Solid Mechanics	3	MECE 3360	Experimental Methods	3		
	MECE 3345	Materials Science	3	MECE 3363	Intro to Fluid Mechanics	3		
	CORE	Social & Behavioral Sciences* , **	3	CORE	Creative Arts*	3		
	CORE	American History*	3			3		
Semester Hours			18	Semester Hours			15	33

YEAR 4	Semester 1 Fall			Semester 2 Spring			Total	
	MECE 4364	Heat Transfer	3	MECE 4341	Mechanical Engr Capstone II	3		
	MECE 4340	Mechanical Engr Capstone I	3	MECE 437X	Mechanical Engr Lab°	3		
	MECE 53XX	Mechanical Engr Elective°°	3	MECE 437X	Mechanical Engr Lab°	3		
	MECE 4331	Design of Machine Elements	3	MECE 53XX	Mechanical Engr Elective°°	3		
	MECE 4343	Thermal Design	3	MECE 53XX	Mechanical Engr Elective°°	3		
	Semester Hours			15	Semester Hours			15
							128	

*State of Texas Core Curriculum

**UH's ENTR 3310 or 3311 encouraged, but any State-approved Social and Behavioral Sciences core course will be accepted towards this requirement

°Select from MECE 4371, 4372, and 4373 (Thermal Fluids, Controls & Vibrations, and Applied Materials Science, respectively)

°°Select from MECE 53XX courses, approved nonMECE courses at 3000 level or higher, senior honors thesis, independent study, or MECE 63xx courses (for Accelerated Master's Program participants)

Students should meet with their academic advisor to formulate their own plan.