



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



FRESHMAN YEAR							
Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
CHEM 1411		General Chemistry I	4	PHYS 2425		University Physics I	4
ENGL 1301		Composition I	3	MATH 2414		Calculus II	4
MATH 2413		Calculus I	4	ENGL 2311		Technical and Business Writing	3
ENGR 1201		Introduction to Engineering	2	ENGR 2304**	EENG 3308	Programming for Engineers	3
ENGR 1304		Engineering Graphics	3	HIST 1301		US History I	3
COSC 1301 *		Intro to Computing	0				
			16				17
SOPHOMORE YEAR							
Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
PHYS 2426		University Physics II	4	MATH 2320		Differential Equations	3
MATH 2415		Calculus III	4	ECON 2301 OR ECON 2302		Principles of Macroeconomic OR Principles of Microeconomics)	3
ENGR 2301		Engineering Mechanics: Statics	3	ENGR 2302		Engineering Mechanics: Dynamics	3
MATH 2318		Linear Algebra (2 SCH for UT Tyler)	2		MENG 3306	Mechanics of Materials	3
	MENG 3319	Materials Science and Manufacturing	3		MATH 3351	Probability and Statistics for Eng. and Sci.	3
			16				15
JUNIOR YEAR							
Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
		Creative Arts	3		MENG 3316	Heat Transfer	3
		Technical Elective	3		MENG 3309	Mechanical Systems Design	3
	MENG 3401	Thermodynamics	4		MENG 3211	Thermal-Fluids Labratory	2
	MENG 3310	Fluid Mechanics	3		MENG 3303	Dynamics of Machinery	3
	MENG 3210	Experimental Measurements and Techniques	2		EENG 3301	Electrical Engineering Circuits, Systems, and Applications	3
			15		CMST 1315	Introduction to Public Speaking	3
							17
SENIOR YEAR							
Fall				Spring			
TJC	UT Tyler	Title	Hours	TJC	UT Tyler	Title	Hours
	MENG 4215	Senior Capstone Design I	2		MENG 4216	Senior Capstone Design II	2
	HIST 1302	United States History II	3		POLS 2306	Introductory Texas Politics	3
	PHIL 2306	Introductions to Ethics	3		MENG 4326	Finite Element Analysis	3
	MENG 4312	System Dynamics and Control	3		POLS 2305	Introductory American Government	3
		Technical Elective	3			Technical Elective	3
		Technical Elective	3			Technical Elective	3
			17				17
						Total Credit Hours at Tyler Junior College	64
						Total Credit Hours at UT Tyler	66
						Total Credit Hours	130

* COSC 1301 Institutional requirement at TJC for AS completion not used at UT Tyler

** ENGR 2304, from TJC, if passed will be accepted for EENG 3308 at UT Tyler

Courses Highlighted in green are available for co-enrollment at UT Tyler