



The University of Texas at Austin
Mechanical Engineering
 Cockrell School of Engineering

16-18 through 2024-26

Undergraduate Catalog General Curriculum

Legend		Course Flags In the process of fulfilling the core curriculum and other degree requirements, undergrads complete courses with content in the following areas:
FLAG	Pre-requisite – credit for	<ul style="list-style-type: none"> • Wr – Writing (2 courses) • QR – Quantitative Reasoning (1 course) • GC – Global Cultures (1 course) • CD – Cultural Diversity in the US (1 course) • E – Ethics (1 course) • II – Independent Inquiry (1 course) <small>*not all courses will carry this flag; check the course schedule</small>
Course C	Co-requisite – credit OR registration for	
Course Name	C – Core Curriculum	
PRE-REQ	S – Supporting Course	
CO-REQ	T – Technical Area	

1	Fall	QR M 408C ^C Differential and Integral Calculus <small>70+ on UT Math Assessment</small>	QR CH 301 ^C Principles of Chemistry I <small>ALEKS 85+ (M 408C/D)</small>	M E 302 Intro to Engr. Design & Graphics	CD*/GC* UGS 302/3 ^C First-Year Signature Course	RHE 306 ^C Rhetoric and Writing	
	Spring	M 408D Sequences, Series & Multivariable Calculus <small>M 408C</small>	QR PHY 303K ^C Engineering Physics I <small>M 408C/K (M 408D/L) (PHY 105M)</small>	QR PHY 105M Lab for PHY 303K <small>(PHY 303K)</small>	E, Wr E S 333T Engineering Communication <small>RHE 306</small>	CD*/GC* Soc. Sci. ^C Social & Behavioral Sci. from Approved List	CD*/GC* VAPA ^C Visual & Performing Arts from Approved List
2	Fall	QR M 427J Diff. Eqns. With Linear Algebra <small>M 408D/L</small>	PHY 303L ^C Engineering Physics II <small>M 408C/L (M 408D/M) (PHY 303K) (PHY 103M)</small>	PHY 105N Lab for PHY 303L <small>(PHY 105M) (PHY 303L)</small>	E M 306 Statics <small>M 408D/L (PHY 303K) (PHY 105M)</small>	M E 316T Thermodynamics <small>CH 301 (M 408D/M) (PHY 303K)</small>	GOV 310L ^C Amer. Government
	Spring	M 427L Advanced Calculus for Applications II <small>M 408D/L</small>	E M 319 Mechanics of Solids <small>E M 306 (M 408D/M) (PHY 303K)</small>	M E 318M Intro to Comp & Engr. Comp. Methods <small>M 427J</small>	M E 314D Dynamics <small>E M 306 (M 408D/M)</small>	CD* US History ^C Approved US History Course	
3	Fall	M E 334 Materials Engineering <small>CH 301 (PHY 303L) (PHY 105N) (E M 319) (M E 134L)</small>	M E 134L Materials Engineering Lab <small>(M E 334)</small>	M E 330 Fluid Mechanics <small>E M 306 (M 427J) (M E 316T)</small>	M E 130L Expt. Fluid Mechanics <small>(M E 330)</small>	QR M E 335 Engineering Statistics <small>M 408D/M</small>	CD* US History ^C Approved US History Course
	Spring	M E 340 Mechatronics <small>M 427J (M E 140L) (M E 318M) (PHY 303L) (PHY 103N)</small>	M E 140L Mechatronics Lab <small>(M E 340)</small>	M E 338 Machine Elements <small>E M 319 (M E 334) (M E 134L)</small>	M E 339 Heat Transfer <small>M E 318M (M E 139L) (M E 330) (M E 130L)</small>	M E 139L Expt. Heat Transfer <small>(M E 339)</small>	CGE ^T Career Gateway Elective <small>Varies with each track</small>
4	Fall	M E 344 Dynamic Systems and Controls <small>M 427J (M E 144L) (M E 318M) (M E 314D) (M E 340) (M E 140L)</small>	M E 144L Dynamic Systems and Controls Lab <small>(M E 344)</small>	Wr M E 366J ME Design Methodology <small>ALL ARE PRE-REQS: (M E 302) (M E 338) (M E 333T) (M E 339) (M E 330) (M E 139L) (M E 130L) (M E 340) (M E 335) (M E 140L)</small>	QR M E 353 Engineering Finance <small>M E 335</small>	CGE ^T Career Gateway Elective <small>Varies with each track</small>	CD* GOV 312L/P ^C Topics in Government
	Spring	II, Wr M E 266K Design Project <small>M E 344 (M E 266P) (M E 144L) (M E 353) (M E 366J)</small>	M E 266P Design Project Lab <small>M E 344 (M E 266K) (M E 144L) (M E 353) (M E 366J)</small>	CGE ^T Career Gateway Elective <small>Varies with each track</small>	CGE ^T Career Gateway Elective <small>Varies with each track</small>	CD*/GC* Math or Natural Sci. Elective ^S <small>Choose from the ABET approved list found in the advising office or online</small>	CD*/GC* E 316 ^C <small>*Must take E 316L, 316M, 316N, or 316P Humanities</small> <small>RHE 306</small>

MECHANICAL ENGINEERING

16-18, 18-20, 20-22, 22-24 & 2024-26 Undergraduate Catalog

Suggested Arrangement of Courses for Eight-Semester Program

126 credit hours

First Year:

33 credit hours

Fall:	Hours:	Spring:	Hours:
CH 301 , <i>Principles of Chemistry I</i> _____	3	M 408D , <i>Sequences, Series, & Multivariable Calculus</i> _____	4
M 408C , <i>Differential & Integral Calculus</i> _____	4	PHY 303K , <i>Engineering Physics</i> _____	3
M E 302 , <i>Intro. to Engineering Design and Graphics</i> _____	3	PHY 105M , <i>Lab for PHY 303K</i> _____	1
RHE 306 , <i>Rhetoric and Writing</i> _____	3	Approved Visual and Performing Arts*_____	3
UGS 302 or 303 , <i>First-Year Signature Course</i> _____	3	Approved Social and Behavioral Science*_____	3
		E S 333T , <i>Engineering Communication</i> _____	3
TOTAL _____	16	TOTAL _____	17

Second Year:

33 credit hours

Fall:	Hours:	Spring:	Hours:
M 427J , <i>Diff. Eqns. With Linear Algebra</i> _____	4	M 427L , <i>Advanced Calculus for Applications II</i> _____	4
PHY 303L , <i>Engineering Physics II</i> _____	3	E M 319 , <i>Mechanics of Solids</i> _____	3
PHY 105N , <i>Lab for PHY 303L</i> _____	1	M E 318M , <i>Intro. to Comp. & Engr. Comp. Methods</i> _____	3
E M 306 , <i>Statics</i> _____	3	M E 314D , <i>Dynamics</i> _____	3
M E 316T , <i>Thermodynamics</i> _____	3	US History*_____	3
American and Texas Government_____	3		
TOTAL _____	17	TOTAL _____	16

Third Year:

28 credit hours

Fall:	Hours:	Spring:	Hours:
M E 330 , <i>Fluid Mechanics</i> _____	3	M E 339 , <i>Heat Transfer</i> _____	3
M E 130L , <i>Experimental Fluid Mechanics</i> _____	1	M E 139L , <i>Experimental Heat Transfer</i> _____	1
M E 334 , <i>Materials Engineering</i> _____	3	M E 338 , <i>Machine Elements</i> _____	3
M E 134L , <i>Materials Engineering Laboratory</i> _____	1	M E 340 , <i>Mechatronics</i> _____	3
M E 335 , <i>Engineering Statistics</i> _____	3	M E 140L , <i>Mechatronics Laboratory</i> _____	1
US History*_____	3	Approved Career Gateway Elective*_____	3
TOTAL _____	14	TOTAL _____	14

Fourth Year:

32 credit hours

Fall:	Hours:	Spring:	Hours:
M E 344 , <i>Dynamic Systems and Controls</i> _____	3	M E 266K , <i>Mechanical Engineering Design Project</i> _____	2
M E 144L , <i>Dynamic Systems and Controls Laboratory</i> _____	1	M E 266P , <i>Design Project Laboratory</i> _____	2
M E 353 , <i>Engineering Finance</i> _____	3	Approved Career Gateway Elective *_____	3
M E 366J , <i>Mechanical Engr. Design Methodology</i> _____	3	Approved Career Gateway Elective *_____	3
Approved Career Gateway Elective *_____	3	Approved Mathematics or Natural Science Elective*_____	3
American and Texas Government_____	3	E 316 , <i>Masterworks of Literature</i> _____	3
TOTAL _____	16	TOTAL _____	16

*Check with the M E Academic Advising Office in ETC 2.146 for a list of approved courses.