



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

2016-18, 2018-20, 2020-22

Undergraduate Catalog General Curriculum

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

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

# MECHANICAL ENGINEERING

## 2016-2018/2018-2020/2020-2022 Undergraduate Catalog

### Suggested Arrangement of Courses for Eight-Semester Program

126 credit hours

#### First Year:

33 credit hours

Fall:	Hours:	Spring:	Hours:
<b>CH 301</b> , Principles of Chemistry I _____	3	<b>M 408D</b> , Sequences, Series, & Multivariable Calculus _____	4
<b>M 408C</b> , Differential & Integral Calculus _____	4	<b>PHY 303K</b> , Engineering Physics _____	3
<b>M E 302</b> , Intro. to Engineering Design and Graphics _____	3	<b>PHY 103M</b> , Engineering Physics I Laboratory _____	1
<b>RHE 306</b> , Rhetoric and Writing _____	3	Approved Visual and Performing Arts* _____	3
<b>UGS 302</b> or <b>303</b> , First-Year Signature Course _____	3	Approved Social and Behavioral Science* _____	3
		<b>M E 333T</b> , Engineering Communication _____	3
<b>TOTAL</b> _____	<b>16</b>	<b>TOTAL</b> _____	<b>17</b>

#### Second Year:

33 credit hours

Fall:	Hours:	Spring:	Hours:
<b>M 427J</b> , Diff. Eqns. With Linear Algebra _____	4	<b>M 427L</b> , Advanced Calculus for Applications II _____	4
<b>PHY 303L</b> , Engineering Physics II _____	3	<b>E M 319</b> , Mechanics of Solids _____	3
<b>PHY 103N</b> , Engineering Physics II Laboratory _____	1	<b>M E 318M</b> , Intro. to Comp. & Engr. Comp. Methods _____	3
<b>E M 306</b> , Statics _____	3	<b>M E 314D</b> , Dynamics _____	3
<b>M E 316T</b> , Thermodynamics _____	3	US History* _____	3
American and Texas Government _____	3		
<b>TOTAL</b> _____	<b>17</b>	<b>TOTAL</b> _____	<b>16</b>

#### Third Year:

28 credit hours

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

#### Fourth Year:

32 credit hours

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

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