



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

16-18 through 2024-26

Undergraduate Catalog General Curriculum

### Legend

FLAG

Course C

Course Name

PRE-REQ CO-REQ

**Pre-requisite** – credit for  
**Co-requisite** – credit OR  
registration for

**C** – Core Curriculum  
**S** – Supporting Course  
**T** – Technical Area

### Course Flags

In the process of fulfilling the core curriculum and other degree requirements, undergrads complete courses with content in the following areas:

- **W** – 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)

\*not all courses will carry this flag; check the course schedule

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

\*\*\*Some courses may not be taken in the order that they appear. This is a top-level overview of the curriculum and is not intended to be a detailed guide. Consult with your advisor for more information.

\*\*Some courses may not be taken in the order that they appear. This is a tentative plan\*\*

## MECHANICAL ENGINEERING

### 16-18 through 2024-26 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 105M</b> , Lab for PHY 303K_____	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>E S 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 105N</b> , Lab for PHY 303L_____	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
US History*_____	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 Career Gateway Elective *_____	3
Approved Career Gateway Elective *_____	3	Approved Mathematics or Natural Science Elective*_____	3
American and Texas Government_____	3	<b>E 316</b> , Masterworks of Literature_____	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.