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

16-18, 18-20, 20-22 & 2022-24
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:
- **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)

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

1

Fall

M 408C C — Differential and Integral Calculus
70+ on UT Math Assessment

QR
CH 301 C — Principles of Chemistry I
ALEKS 85+ | M 408C/D

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
M 408C

QR
PHY 303K C — Engineering Physics I
M 408C/K | M 408D/L | PHY 105M

QR
PHY 105M — Lab for PHY 303K
PHY 303K

E, Wr
M E 333T — Engineering Communication
RHE 306

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
M 408D/L

PHY 303L C — Engineering Physics II
M 408C/L | M 408D/M | PHY 303K | PHY 105N | PHY 103M

PHY 105N — Lab for PHY 303L
PHY 105M | PHY 303L

E M 306 — Statics
M 408D/L | PHY 303K | PHY 105M

M E 316T — Thermodynamics
CH 301 | M 408D/M | PHY 303K

GOV 310L C — Amer. Government

Spring

M 427L — Advanced Calculus for Applications II
M 408D/L

E M 319 — Mechanics of Solids
E M 306 | M 408D/M | PHY 303K

M E 318M — Intro to Comp & Engr. Comp. Methods
M 427J

M E 314D — Dynamics
E M 306 | M 408D/M

CD*
US History C — Approved US History Course

3

Fall

M E 334 — Materials Engineering
CH 301 | PHY 303L | PHY 105N | E M 319 | M E 134L

M E 134L — Materials Engineering Lab
M E 334

M E 330 — Fluid Mechanics
E M 306 | M E 130L | M 427J | M E 316T

M E 130L — Expt. Fluid Mechanics
M E 330

QR
M E 335 — Engineering Statistics
M 408D/M

CD*
US History C — Approved US History Course

Spring

M E 340 — Mechatronics
M 427J | M E 140L | M E 318M | PHY 303L | PHY 103N

M E 140L — Mechatronics Lab
M E 340

M E 338 — Machine Elements
E M 319 | M E 334 | M E 134L

M E 339 — Heat Transfer
M E 318M | M E 139L | M E 330 | M E 130L

M E 139L — Expt. Heat Transfer
M E 339

CGE T — Career Gateway Elective
Varies with each track

4

Fall

M E 344 — Dynamic Systems and Controls
M 427J | M E 144L | M E 318M | M E 314D | M E 340 | M E 140L

M E 144L — Dynamic Systems and Controls Lab
M E 344

Wr
M E 366J — 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
M E 353 — Engineering Finance
M E 335

CGE T — Career Gateway Elective
Varies with each track

CD*
GOV 312L/P C — Topics in Government

Spring

II, Wr
M E 266K — Design Project
M E 344 | M E 266P | M E 144L | M E 353 | M E 366J

M E 266P — Design Project Lab
M E 344 | M E 266K | M E 144L | M E 353 | M E 366J

CGE T — Career Gateway Elective
Varies with each track

CGE T — Career Gateway Elective
Varies with each track

Math or Natural Sci. Elective S
Choose from the ABET approved list found in the advising office or online

CD*/GC*
E 316 C — *Must take E 316L, 316M, 316N, or 316P
Humanities
RHE 306

MECHANICAL ENGINEERING

16-18, 18-20, 20-22, 2022-2024 Undergraduate Catalog

Suggested Arrangement of Courses for Eight-Semester Program

126 credit hours

First Year:

33 credit hours

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

Second Year:

33 credit hours

Fall:	Hours:	Spring:	Hours:
M 427J, *Diff. Eqns. With Linear Algebra*	4	**M 427L**, *Advanced Calculus for Applications II*	4
PHY 303L, *Engineering Physics II*	3	**E M 319**, *Mechanics of Solids*	3
PHY 105N, *Lab for PHY 303L*	1	**M E 318M**, *Intro. to Comp. & Engr. Comp. Methods*	3
E M 306, *Statics*	3	**M E 314D**, *Dynamics*	3
M E 316T, *Thermodynamics*	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, *Fluid Mechanics*	3	**M E 339**, *Heat Transfer*	3
M E 130L, *Experimental Fluid Mechanics*	1	**M E 139L**, *Experimental Heat Transfer*	1
M E 334, *Materials Engineering*	3	**M E 338**, *Machine Elements*	3
M E 134L, *Materials Engineering Laboratory*	1	**M E 340**, *Mechatronics*	3
M E 335, *Engineering Statistics*	3	**M E 140L**, *Mechatronics Laboratory*	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, *Dynamic Systems and Controls*	3	**M E 266K**, *Mechanical Engineering Design Project*	2
M E 144L, *Dynamic Systems and Controls Laboratory*	1	**M E 266P**, *Design Project Laboratory*	2
M E 353, *Engineering Finance*	3	Approved Career Gateway Elective *****	3
M E 366J, *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	**E 316,** *Masterworks of Literature*	3
TOTAL	**16**	**TOTAL**	**16**

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