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

2014 - 2016 Undergraduate Catalog

General Curriculum

Legend

FLAG

Course B

Course Name

PRE-REQ | CO-REQ

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

B – Basic Sequence
C – Core Curriculum
M – Major Sequence
S – Supporting Course
T – Technical Area

1

Fall

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

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

M E 302 B
Intro to Engr. Design & Graphics
M 408C/K

Varies
UGS 302/3 C
First-Year Signature Course

RHE 306 C
Rhetoric and Writing
Claim Credit: ACT 26+ SAT Writing 600-800

Spring

M 408D B
Sequences, Series & Multivariable Calculus
M 408C

QR
PHY 303K B
Engineering Physics I
M 408C | PHY 103M

QR
PHY 103M B
Engr. Physics I Lab
PHY 303K

Varies
VAPA C
Visual & Performing Arts from Approved List

Varies
Soc. Sci. C
Social & Behavioral Sci. from Approved List

Varies
US History C
Approved US History Course

2

Fall

M 427J B
Diff. Eqns. With Linear Algebra
M 408D

PHY 303L B
Engineering Physics II
M 408D | PHY 103N
PHY 303K

PHY 103N B
Engr. Physics II Lab
PHY 303L

E M 306 B
Statics
M 408D
PHY 303K
PHY 103M

M E 326 B
Thermodynamics
CH 301
M 408D
PHY 303K

Spring

M E 318M B
Intro to Comp. & Engineering Comp. Methods
M 427K/J

E M 319 B
Mechanics of Solids
E M 306
M 408D
PHY 303K

M E 324 B
Dynamics
E M 306 | M E 318M
M 408D

M E 330 B
Fluid Mechanics
E M 306 | M E 130L
M 427K/J
M E 326

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

EL, Wr
M E 333T B
Engineering Communications
RHE 306

3

Fall

M E 334 M
Materials Engineering
CH 301 | PHY 303L
PHY 303K | PHY 103N
PHY 103M | E M 319
M E 302 | M E 134L

M E 134L M
Materials Engineering Lab
M E 302 | M E 334

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

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

M E 335 S
Engineering Statistics
M 408D | M E 318M

CGE T
Career Gateway Elective
Varies with each track

Spring

M E 340 M
Mechatronics
M 408D | M E 140L
PHY 303L
PHY 103N

M E 140L M
Mechatronics Lab
M E 340

M E 338 M
Machine Elements
E M 319 | M E 334

M E 353 S
Engineering Finance
M 408D
M E 318M
M E 335

CGE T
Career Gateway Elective
Varies with each track

GOV 310L C
Amer. Government

4

Fall

M E 344 M
Dynamic Systems and Controls
M 427K/J | M E 144L
M E 318M
M E 324
M E 340
M E 140L

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

Wr
M E 366J M
ME Design Methodology
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

CGE T
Career Gateway Elective
Varies with each track

Math Elective S
From Approved List

Varies
GOV 312L C
Topics in Government
GOV 310L

Spring

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

M E 266P M
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

Math or Natural Sci. S
From Approved List

Varies
E 316 C
Humanities
RHE 306

Varies
US History C
Approved US History Course

MECHANICAL ENGINEERING

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Suggested Arrangement of Courses for Eight-Semester Program

125 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, *Introduction to Engineering Design and Graphics*	3	**PHY 103M**, *Engineering Physics I Laboratory*	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
		American History*	3
TOTAL	**16**	**TOTAL**	**17**

Second Year:

33 credit hours

Fall:	Hours:	Spring:	Hours:
M 427J, *Diff. Eqns. With Linear Algebra*	4	**M E 318M**, *Intro to Computer and Engineering Computer Methods*	3
PHY 303L, *Engineering Physics II*	3	**E M 319**, *Mechanics of Solids*	3
PHY 103N, *Engineering Physics II Laboratory*	1	**M E 324**, *Dynamics*	3
E M 306, *Statics*	3	**M E 330**, *Fluid Mechanics*	3
M E 326, *Thermodynamics*	3	**M E 130L**,*Experimental Fluid Mechanics*	1
		M E 333T, *Engineering Communications*	3
TOTAL	**14**	**TOTAL**	**16**

Third Year:

30 credit hours

Fall:	Hours:	Spring:	Hours:
M E 334, *Materials Engineering*	3	**M E 340**, *Mechatronics*	3
M E 134L, *Materials Engineering Laboratory*	1	**M E 140L**, *Mechatronics Laboratory*	1
M E 339, *Heat Transfer*	3	**M E 338**, *Machine Elements*	3
M E 139L, *Experimental Heat Transfer*	1	**M E 353**, *Engineering Finance*	3
M E 335, *Engineering Statistics*	3	Approved Career Gateway Elective*	3
Approved Career Gateway Elective*	3	American and Texas Government	3
TOTAL	**14**	**TOTAL**	**16**

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 366J, *Mechanical Engineering Design Methodology*	3	Approved Career Gateway Elective *	3
Approved Career Gateway Elective *	3	Approved Mathematics or Natural Science Elective*	3
Approved Mathematics Elective*	3	**E 316,** *Masterworks of Literature*	3
American and Texas Government	3	American History*	3
TOTAL	**16**	**TOTAL**	**16**

*Check with the M E Academic Advising Office in ETC 5.224 for a list of approved courses.