

# TEXAS A&M UNIVERSITY - MECHANICAL ENGINEERING

# 2018-2019 – Cat. #141 - REVISED

Year 1

16 hrs.

MATH 151\*<sup>4</sup> Engineering Math I (Pre-Engineering Coursework)

ENGR 102\*<sup>2</sup> Computation Engr. Lab I (Pre-Engineering Coursework)

CHEM 107\*/117<sup>4</sup> Gen. Chem. for Engineers/Lab (Pre-Engineering Coursework)

ENGL 103or104<sup>3</sup> Comp. & Rhetoric (UCC Elective)

UCC Elective<sup>3</sup> (UCC general education electives)

15 hrs.

MATH 152\*<sup>4</sup> Engineering Math II (Pre-Engineering Coursework)

ENGR 216\*<sup>2</sup> Mechanics Lab II (Pre-Engineering Coursework)

PHYS 206\*<sup>3</sup> Physics for Engineers I (Pre-Engineering Coursework)

Comm. Elective COMM 205; ENGL 203 or 210 (UCC Elective)

UCC Elective<sup>3</sup> (UCC general education electives)

Prerequisites: MATH 151, ENGR 102, MATH 151, ENGR 216, MATH 151, ENGR 216, PHYS 206

**KEY**

- Pre-Engineering Coursework
- University Core Curriculum (UCC) general education electives
- Lab courses or courses with labs
- Required Prerequisite
- Preceded or accompanied by; co-requisite
- Number of course credits

\* Course requires grade of C or better

Year 2

16 hrs.

MATH 251\*<sup>3</sup> Engineering Math III (Pre-Engineering Coursework)

ENGR 217\*<sup>2</sup> Electricity/Mag. Lab III (Pre-Engineering Coursework)

PHYS 207\*<sup>3</sup> Physics for Engineers II (Pre-Engineering Coursework)

MEEN 225\*<sup>3</sup> Engineering Mechanics (Pre-Engineering Coursework)

MEEN/MSEN 222\*<sup>3</sup> Materials Science (Pre-Engineering Coursework)

MEEN 210\*<sup>2</sup> Modeling for Mech. Design (Pre-Engineering Coursework)

Prerequisites: MATH 152, MATH 152, PHYS 206, MATH 152, PHYS 206, PHYS 206, MATH 251, CHEM 107/117, ENGR 216, PHYS 207, ENGR 216, ENGR 217, PHYS 206, ENGR 102

17 hrs.

MATH 308\*<sup>3</sup> Differential Equations (Pre-Engineering Coursework)

ECEN 215\*<sup>3</sup> Prin. of Electrical Engr. (Pre-Engineering Coursework)

ISEN 302<sup>2</sup> Econ. Engr. Analysis (Pre-Engineering Coursework)

MEEN 305\*<sup>3</sup> Mechanics in Materials (Pre-Engineering Coursework)

MEEN 315\*<sup>3</sup> Prin. of Thermodynamics (Pre-Engineering Coursework)

UCC Elective<sup>3</sup> (UCC general education electives)

Prerequisites: MATH 251, PHYS 207, MATH 251, MATH 152, MEEN 222, MEEN 225, MEEN 225, MATH 251

**UCC Elective Requirements**  
[core.tamu.edu](http://core.tamu.edu)

- 6 credits of POLS 206 and 207
- 6 credits of American History\*\*
- 3 credits of Creative Arts\*\*
- 3 credits of Soc./Behavioral Sciences\*\*
- 3 credits of Lang/Phil/Cult. - ENGR/PHIL 482

\*\*6 credits of International, Cultural Diversity (ICD) can be dual shared by UCC electives - [icd.tamu.edu](http://icd.tamu.edu)

\*\*\* Course meets University Writing requirement

Year 3

16 hrs.

MEEN 357\*<sup>3</sup> Engr. Analysis for Mech. (Pre-Engineering Coursework)

MEEN 260\*<sup>3</sup> Mechanical Measurements (Pre-Engineering Coursework)

MEEN 381<sup>1</sup> Seminar (Pre-Engineering Coursework)

MEEN 363\*<sup>3</sup> Dynamics and Vibrations (Pre-Engineering Coursework)

MEEN 344\*<sup>3</sup> Fluid Mechanics (Pre-Engineering Coursework)

UCC Elective ICD\*\*<sup>3</sup> (UCC general education electives)

Prerequisites: MATH 308, MEEN 210, MEEN 225, ECEN 215, MATH 308, MEEN 315, MEEN 225, MATH 308, MEEN 357, MEEN 315

17 hrs.

MEEN 364\*<sup>3</sup> Dynamic Syst. and Control (Pre-Engineering Coursework)

MEEN 360\*<sup>3</sup> Mtls. & Mfg. Select. in Dsn. (Pre-Engineering Coursework)

MEEN 361\*<sup>1</sup> Mtls. & Mfg. Lab (Pre-Engineering Coursework)

MEEN 368\*<sup>3</sup> Solid Mech. in Mech. Design (Pre-Engineering Coursework)

MEEN 461\*<sup>3</sup> Heat Transfer (Pre-Engineering Coursework)

MEEN 345\*<sup>1</sup> Fluid Mechanics Lab (Pre-Engineering Coursework)

UCC Elective ICD\*\*<sup>3</sup> (UCC general education electives)

Prerequisites: MEEN 260, MEEN 363, MEEN 222, MEEN 260, MEEN 210, MEEN 222, MEEN 260, MEEN 360, MEEN 305, MEEN 344, MEEN 260, MEEN 344

*ENGR<sup>x</sup> - High Impact learning experience*

Year 4

16 hrs.

MEEN 401\*<sup>3</sup> Intro. to Mech. Engr. Design (Pre-Engineering Coursework)

MEEN 404\*\*\*<sup>3</sup> Engineering Laboratory (Pre-Engineering Coursework)

MEEN Thermofluids System Elective<sup>3</sup> (Pre-Engineering Coursework)

MEEN Mech. & Mfg. System Elective<sup>3</sup> (Pre-Engineering Coursework)

MEEN 464\*<sup>1</sup> Heat Transfer Lab (Pre-Engineering Coursework)

UCC Elective<sup>3</sup> (UCC general education electives)

Prerequisites: MEEN 360/361, MEEN 364, MEEN 368, MEEN 461, MEEN 360/361, MEEN 364, MEEN 461, MEEN 401, MEEN 345, MEEN 461

15 hrs.

MEEN 402<sup>3</sup> Intermediate Design (Pre-Engineering Coursework)

MEEN Technical Elective<sup>3</sup> (Pre-Engineering Coursework)

General Elective Any 300-499<sup>3</sup> (Pre-Engineering Coursework)

MEEN/Non-MEEN Technical Elective<sup>3</sup> (Pre-Engineering Coursework)

ENGR/PHIL 482\*\*\*<sup>3</sup> Engineering Ethics (Pre-Engineering Coursework)

Prerequisite: MEEN 401

**TOTAL CREDIT HOURS:128**  
[Engineering.tamu.edu/mechanical](http://Engineering.tamu.edu/mechanical)

NAME: \_\_\_\_\_

UIN: \_\_\_\_\_