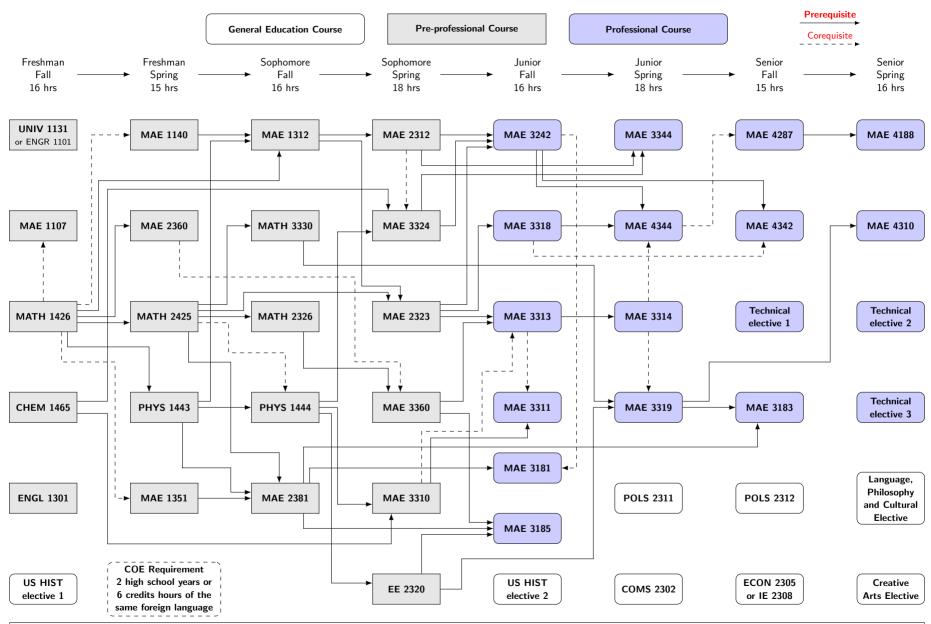
2022-2023 Mechanical Engineering Curriculum Flow Chart



Notes: 1. To be in good academic standing within the MAE department, each student must maintain a minimum 3-GPA calculation of 2.25 in the pre-professional program. Further, in the professional program, each student must maintain a minimum UTA cumulative GPA of 2.0 and a minimum major GPA of 2.0. 2. No professional course may be taken unless the student is admitted into the professional program or obtains the consent of the Undergraduate Advisor. Professional courses may be taken to fill out a schedule in the semester that the last pre-professional course is taken. 3. Some professional courses are offered only once a year. Students are urged to plan their course sequence schedules carefully to avoid delaying their graduation.

# 2022-2023 Bachelor of Science in Mechanical Engineering University of Texas at Arlington – Four Year Course Sequence

# **First Year**

### Fall Semester – 16 Total Hours

Course	Hours
MAE 1107 – Intro to Mechanical Engineering	1
ENGR 1101 – Intro to Engineering <u>OR</u> UNIV 1131 – Student Success	1
MATH 1426 – Calculus 1	4
CHEM 1465 – Chemistry for Engineers	4
ENGL 1301 – Rhetoric & Composition	3
U.S. History Elective	3

### Second Year

#### Fall Semester – 16 Total Hours

Course	Hours
MAE 1312 – Engineering Statics	3
MATH 3330 – Intro to Linear Algebra	3
MATH 2326 – Calculus 3	3
PHYS 1444 – General Technical Physics II	4
MAE 2381–Experimental Methods/Measure	3

## **Third Year**

### Fall Semester – 16 Total Hours

Course	Hours
MAE 3242 – Mechanical Design 1	2
MAE 3318 – Kinematics & Dynamics	3
MAE 3181 – Materials & Structures Lab	1
MAE 3313 – Fluid Mechanics	3
MAE 3311 – Thermodynamics 2	3
MAE 3185 – Intro to Mechatronics	1
U.S. History Elective	3

## Fourth Year

### Fall Semester – 15 Total Hours

Course	Hours
Technical Elective 1	3
MAE 4287 – Design Project 1	2
MAE 4342 – Mechanical Design 2	3
MAE 3183 – Measurements Laboratory 2	1
ECON 2305 – Principles of Macroeconomics <u>OR</u> IE 2308 – Economics for Engineers	3
POLS 2312 – State & Local Government	3

### Notes:

Visit the <u>UTA Transfer Guide</u> to view Texas Common Core Number course number equivalents. Visit the <u>UTA Catalog</u> to view general core curriculum requirements for elective courses. COE Requirement: Two high school years or six credit hours of the same foreign language.

#### Spring Semester – 15 Total Hours

Course	Hours
MAE 1140 – Problems in MAE	1
MAE 2360–Numerical Analysis/Programming	3
MATH 2425 – Calculus 2	4
PHYS 1443 – General Technical Physics 1	4
MAE 1351 – Intro to Engineering Design	3

### Spring Semester – 18 Total Hours

Course	Hours
MAE 2312 – Solid Mechanics	3
MAE 2323 - Dynamics	3
MAE 3324 – Struc & Mech Behavior Material	3
MAE 3310 – Thermodynamics 1	3
MAE 3360 – Engineering Analysis	3
EE 2320 – Circuit Analysis	3

### Spring Semester – 18 Total Hours

Course	Hours
MAE 3344 – Intro to Manufacturing	3
MAE 4344 – Computer-Aided Engineering	3
MAE 3314 – Heat Transfer	3
MAE 3319 – Dynamic Systems Modeling	3
POLS 2311 – Govt of the United States	3
COMS 2302 – Prof. & Technical Comm	3

### Spring Semester – 16 Total Hours

1 0	
Course	Hours
Technical Elective 2	3
Technical Elective 3	3
MAE 4188 – Design Project 2	1
MAE 4310 – Intro to Automatic Control	3
Creative Arts Elective	3
Language, Philosophy, Culture Elective	3