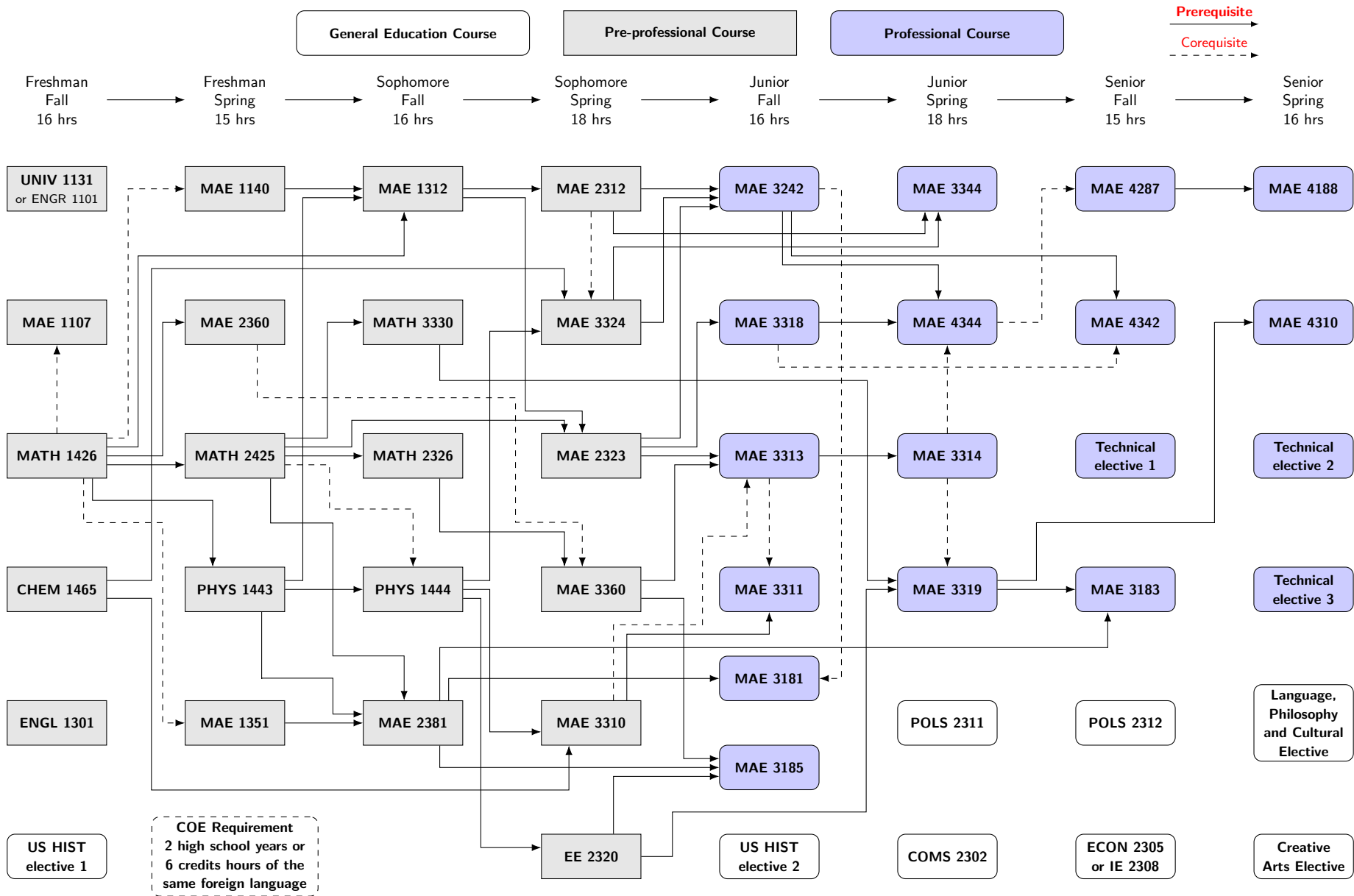


2024-2025 Mechanical Engineering Curriculum Flow Chart



Notes: 1. To be in good academic standing within the MAE department, each student must be in compliance with all academic regulations of UTA and COE. In the preprofessional program, each student must maintain a minimum 3-GPA calculation of 2.5 and have a total of no more than four unsuccessful attempts at engineering courses. 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. Professional courses may be taken to fill out a schedule in the semester that the last pre-professional course is taken. 3. Courses may not be offered every semester. Students are urged to plan their course sequence schedules carefully to avoid delaying their graduation.

2024-2025 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	1
OR UNIV 1131 – Student Success	
MATH 1426 – Calculus 1	4
CHEM 1465 – Chemistry for Engineers	4
ENGL 1301 – Rhetoric & Composition	3
U.S. History Elective	3

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

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

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

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

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

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	3
OR IE 2308 – Economics for Engineers	
POLS 2312 – State & Local Government	3

Spring Semester – 16 Total Hours

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

Notes:

Visit the [UTA Transfer Guide](#) to view Texas Common Core Number course number equivalents.

Visit the [UTA Catalog](#) to view general core curriculum requirements for elective courses.

COE Requirement: Two high school years or six credit hours of the same foreign language.