

AEROSPACE ENGINEERING

Four Year Plan, FA19 Catalog

Aerospace engineering is a four-year curriculum that begins with fundamental engineering courses in mechanics, thermodynamics, materials, solid mechanics, fluid mechanics, and heat transfer. Additional courses are required in aerospace structures, aerodynamics, flight mechanics, propulsion, controls, and aerospace design. Graduates of this program normally enter the aerospace industry to develop aircraft and spacecraft, but also find employment in other areas that use similar technologies, such as mechanical and energy-related fields. Examples include automobile, naval, and sporting equipment manufacturing. This program received ABET accreditation in 2002.

Recommended Sequence of Required Courses: Updated June 2019

| <u>FALL QUARTER</u> | <u>WINTER QUARTER</u> | <u>SPRING QUARTER</u> |
|---------------------------------|----------------------------------|----------------------------------|
| Year 1 | | |
| Math 20A | Math 20B | Math 20C |
| MAE 2 | Phys 2A | Phys 2B |
| Chem. 6A | GE | GE |
| GE (<i>General Education</i>) | GE | GE |
| Year 2 | | |
| Math 20D | Math 18 (<i>formerly 20F</i>) | Math 20E |
| Phys. 2C & Phys 2CL | MAE 8 | MAE 131A |
| MAE 21* | MAE 30A (<i>formerly 130A</i>) | MAE 30B (<i>formerly 130B</i>) |
| GE | GE | GE |
| Year 3 | | |
| MAE 11 (<i>formerly 110A</i>) | MAE 101A* | MAE 101B* |
| MAE 105* | MAE 143A* | MAE 143B* |
| MAE 180A | TE (<i>Technical Elective</i>) | MAE 170 |
| MAE 107 | SE 160A* | SE 160B* |
| Year 4 | | |
| MAE 101C* | MAE 155A* | MAE 155B* |
| MAE 104* | MAE 175A * | GE |
| GE | MAE 142* | GE |
| GE | MAE 113* | TE |

WHEN SCHEDULING CLASSES, **THE MAE DEPARTMENT FOLLOWS THIS CURRICULUM GRID.**
DEVIATION FROM THIS ACADEMIC PLAN COULD DELAY YOUR GRADUATION. IT IS YOUR
 RESPONSIBILITY TO BE AWARE OF COURSE PREREQUISITES AND QUARTERLY COURSE OFFERINGS.

- Chem 6AH may be taken in place of Chem 6A.
- All courses required for the major must be taken for a letter grade. The Pass/No Pass grading option is not allowed.
- Students may graduate with one D in a course required for the major.
- In fulfilling the General Education (GE) requirements, students must take at least 24 units in the arts, humanities, and social sciences, not including subjects such as accounting, industrial management, finance, or personnel administration. Twelve GE courses are listed here; individual college requirements may be higher or lower. Please contact your college advisor for more information.
- The Technical Elective (TE) course must be an upper-division or graduate course in the engineering sciences, natural sciences or mathematics and must be selected with prior approval of the Department. Refer to the list of pre-approved TEs available at www.mae.ucsd.edu.

* **ASTERISK DENOTES A COURSE THAT MUST BE TAKEN AT LEAST BY THAT QUARTER TO GRADUATE IN FOUR YEARS.**