

# MECHANICAL ENGINEERING

## Four Year Plan, 2014-2016 Catalogs

mae.ucsd.edu

The Mechanical Engineering Program has a traditional ABET accredited four-year curriculum involving mechanics, vibrations, thermodynamics, fluid flow, heat transfer, materials, control theory and mechanical design. Graduates of this program find employment in the high-technology elector-mechanical industry as well as in the mechanical and aerospace industry.

*Recommended Sequence of Required Courses: Updated May 2018*

| <u>FALL QUARTER</u>     | <u>WINTER QUARTER</u>   | <u>SPRING QUARTER</u> |
|-------------------------|-------------------------|-----------------------|
| <b>Year 1</b>           |                         |                       |
| Math 20A*               | Math 20B*               | Math 20C*             |
| Chem. 6A*               | Chem 6B                 | Phys 2B*              |
| GE (General Education)  | Phys 2A*                | MAE 3                 |
| GE                      | GE                      | GE                    |
| <b>Year 2</b>           |                         |                       |
| Math 20D                | Math 18* (formerly 20F) | Math 20E              |
| Phys. 2C & 2CL          | MAE 8                   | MAE 108 <sup>1</sup>  |
| MAE 20                  | MAE 130A*               | MAE 130B              |
| GE                      | GE                      | MAE 131A              |
| <b>Year 3</b>           |                         |                       |
| MAE 105*                | MAE 101A*               | MAE 101B*             |
| MAE 107                 | MAE 130C                | MAE 143B*             |
| MAE 11 (formerly 110A)  | MAE 143A*               | MAE 170               |
| MAE 140                 | MAE 160* or MAE 131B*   | GE                    |
| <b>Year 4</b>           |                         |                       |
| MAE 101C*               | MAE 156A*               | MAE 156B*             |
| MAE 150*                | MAE 171A*               | TE                    |
| TE (Technical Elective) | TE                      | TE                    |
| GE                      | GE                      | GE                    |

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.

- MAE 108 can be replaced with one of the following courses: **Math 183, ECE 109, or SE 125**. Credit **not** offered for MAE 108 if ECE 109, ECON 120A, MATH 180A, MATH 183, MATH 186, or SE 125 were previously or concurrently taken. Please check with the MAE academic advisers for more information.
- Chem 6AH and 6BH may be taken in place of Chem 6A and 6B.
- 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. Ten GE courses are listed here; individual college requirements may be higher or lower.
- Technical Elective (TE) courses must be upper-division or graduate courses 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 the MAE Advising Office and mae.ucsd.edu.

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