

2020 Suggested Courses for Mechanical Engineering (ME) 2020-2021 Catalog

Please Note: As you plan, pay close attention to the prerequisites for ME 328. You cannot graduate earlier than 5 quarters from when you take ME 328. The prerequisites for ME 328 are: ME 234; CE 207; CSC 231 or CSC 234; MATE 210; ME 212; and ME 251. Corequisite: IME 141 or ITP 341 or ME 161.

1) Major course options:

- May already be fulfilled with transfer credit; check prerequisites
- ME 228 (2)*: Engineering Design Communication or ME 251 (2)*: Intro to Solid Modeling
 - If you have transfer credit for ME 228 you should enroll in ME 251. Note that in ME 251, you will use Solidworks as the CAD software. You should familiarize yourself with Solidworks. Once you have your Cal Poly ID, you can access Solidworks by using our applications server.
 - o If you didn't take a course articulated to ME 228, you may still be able to get credit for it if you took at least a 2 quarter unit college level CAD course using SolidWorks and can complete an assignment that shows proficiency in GDT, geometric dimensioning, and tolerancing. More information about this option will be emailed to you in mid-July with details on the assignment.
- ME 263 (1)*: Intro to Mechanical Engineering for Transfers (not offered in Winter)
- ME 264 (1)*: Intro to Mechanical Engineering for Transfers Lab (not offered in Winter; take with ME 263)
- ME 211 (3)*: Engineering Statics or ME 212 (3)*: Engineering Dynamics
- ME 236 (3): Measurement & Data Analysis
- ME 234 (3)*: Philosophy of Design
- ME 302 (3): Thermodynamics I
- ME 341 (3): Fluid Mechanics I

2) Support course options:

- May already be fulfilled with transfer credit; check prerequisites
- CE 204 (3)* Mechanics of Materials I or CE 207 (2)*: Mechanics of Materials II
 - o If you have taken equivalent to CE 204 but not CE 207, enroll in CE 207.
 - If you still need CE 204 and CE 207, can take them separately over two quarters or enroll in a CE 208 (5) combo course fall quarter to expedite the sequence.
- EE 201 (3) & EE 251 (1): Electric Circuit Theory and Laboratory or EE 321 (3) & 361 (1): Electronics & Laboratory
- MATE 210 (3)* & MATE 215 (1): Materials Engineering
- MATH 344 (4): Linear Analysis II

- CSC 231 (2)*: Programming for Engineering Students
- IME 141 (1)*: Manufacturing Processes: Net Shape or ME 161: Intro to Composite Materials Manufacturing
- IME 142 (2): Manufacturing Processes: Materials Joining
- IME 143 (2): Manufacturing Processes: Materials Removal (transfer students take IME 143 instead of IME 145 & 146)
- BIO 213 (2) & BMED 213 (2): Life Science for Engineers and Bioengineering Fundamentals

*Course is required or strongly recommended in fall due to course availability or prerequisites ^Course should be taken as soon as possible

3) General Education (GE) course options:

- May already be fulfilled with transfer credit; check prerequisites
- Any remaining lower division GE course(s)
- Upper-Division C
- The <u>Graduation Writing Requirement (GWR) must be fulfilled</u> before graduation by either enrolling in a GWR-approved, upper-division English course (which can double-count with the Upper-Division C) OR by registering for the Writing Proficiency Examination (WPE). GWR courses are searchable on Schedule Builder.
- The <u>United States Cultural Pluralism (USCP) requirement must be satisfied before graduation.</u>
 USCP courses may double-count with a remaining GE requirement and are searchable on Schedule Builder.

4) Additional notes:

- Recommended that you enroll in 12 16 units
- Transfer students take ME 228, 263, and 264 instead of ME 128, 129, 130, and 163.
- Concentrations: we encourage you to declare your concentration during your first year <u>Concentration options for your major</u> <u>Instructions for declaring your concentration</u>
- For planning purposes, refer to <u>Term Typically Offered Website</u> for the term(s) ME courses are typically offered.

5) Engineering Student Services:

Engineering Advising | Multicultural Engineering Program | International Exchange Program

Location: Building 40, Room 115

Phone: 805-756-1461

Email Website

6) ME Department:

Location: Building 13, Room 254 Phone number: 805-756-1334

Email Website

Permission Numbers for Major and Support Courses

• Departments may issue <u>permission numbers</u> which are special codes used for students to enroll in classes that have seats reserved for majors, or to override registration errors. For assistance with permission numbers, you can contact Vera Flores <u>eflore05@calpoly.edu</u>.