2021 Suggested Courses for Biomedical Engineering (BMED) 2020 – 2021 Catalog

1) Major course options:
   • May already be fulfilled with transfer credit; check prerequisites
   • BMED 101 (1)*: Introduction to the Biomedical Engineering Major* (required in fall 2021, reach out to BMED Department for permission to enroll in this course. See contact info. below) Take BMED 102 (1): Introduction to Biomedical Engineering Analysis in winter 2022 (this course is only offered once a year)
   • BMED 212 (3): Introduction to Biomedical Engineering Design
   • BMED 310 (4)^: Biomedical Engineering Measurement and Analysis. This class may also be taken winter 2022.
   • Some BMED courses are offered once or twice a year; for planning purposes, refer to the Catalog Website or Terms Typically Offered Website for the term courses are typically offered.

2) Support course options:
   • May already be fulfilled with transfer credit; check prerequisites
   • CE 204 (3)*: Mechanics of Materials I (See notes in Concentration Courses)
   • CSC 231 (2)*: Programming for Engineering Students
   • EE 201 (3)*: Electric Circuit Theory (see notes in Bioinstrumentation Concentration)
   • MATE 210 (3)^: Materials Engineering
   • ME 211 (3)*: Engineering Statics or ME 212 (3)^: Engineering Dynamics or ME 302 (3): Thermodynamics I or/and ME 341 (3): Fluid Mechanics I
   • STAT 312 (4): Statistical Methods for Engineers
   • BIO 161^101 (4): Introduction to Cell and Molecular Biology or BIO 231 (5): Human Anatomy and Physiology I or BIO 232 (5): Human Anatomy and Physiology II
   • ENGL 147 (4): Writing Arguments about STEM (ENGL 147 replaced ENGL 149)

*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 Graduation Writing Requirement (GWR) must be fulfilled before graduation by either enrolling in a GWR-approved, upper-division English course (which can double-count with the Upper-Division C) OR by completing the GWR Portfolio. GWR courses are searchable on Schedule Builder.
• The United States Cultural Pluralism (USCP) requirement must be satisfied before graduation. 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.
• All transfer students admitted in fall 2021 will follow the 20-21 catalog due to changes on the 21-22 catalog that may require additional coursework. You can change your catalog year through the Registrar’s Office, if you wish. We recommend meeting with an advisor before changing your catalog.
• You may need a permission number to enroll in a course. Permission numbers are unique codes departments or class instructors may choose to issue so you can enroll in a class that the system is preventing you from enrolling in on your own. For help registering for BMED courses due to pre-requisite errors, please email Rebecca Burnside (rlburnsi@calpoly.edu) and cc Lily Laiho (llaiho@calpoly.edu).
• Concentrations: we encourage you to declare your concentration during your first year. Concentration options for your major
Instructions for declaring your concentration

Concentration Courses (General Curriculum):
• CE 207 (2)*: Mechanics of Materials II (see note below regarding CE 204 and CE 207)
  Or EE 321 (3): Electronics (check prerequisite)
  o If you have taken equivalent to CE 204 but not CE 207, enroll in CE 207.
  o If you still need CE 204 and CE 207, you can take them separately over two quarters OR enroll in CE 208 (5): Mechanics of Materials, which is designed specifically for transfers students this fall quarter. This course combines CE 204 and CE 207.
• ME 228 (2): Engineering Design Communication
• Additional concentration courses can be found on the catalog.

Concentration Courses (Bioinstrumentation):
• MATH 344*(4): Linear Analysis II
• IME 156 (2): Basic Electronics Manufacturing
• EE 251 (1): Electric Circuits Laboratory (EE 251 is the lab required for EE 201 lecture)
• Additional concentration courses can be found on the catalog.

Concentration Courses (Mechanical Design):
• CE 207 (2)*: Mechanics of Materials II
  o If you have taken equivalent to CE 204 but not CE 207, enroll in CE 207.
  o If you still need CE 204 and CE 207, you can take them separately over two quarters OR enroll in CE 208 (5): Mechanics of Materials, which is designed specifically for transfers students this fall quarter. This course combines CE 204 and CE 207.
• ME 228 (2): Engineering Design Communication
• IME 141 (1): Manufacturing Processes: Net Shape
• MATH 344 (4): Linear Analysis II
• Additional concentration courses can be found on the catalog.

5) Engineering Student Services:
Engineering Advising | Multicultural Engineering Program | International Exchange Program
Location: Building 40, Room 115
Phone: 805-756-1461 (not monitored during COVID-19 office closure)
Email
Website

6) Biomedical Engineering (BMED) Department:
Location: Building 13, Room 260
Phone: 805-756-6400
Website