2020 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 2020, you will be emailed a permission number to enroll in this course.)
     Take BMED 102 (1): Introduction to Biomedical Engineering Analysis in Winter 2021 (this course is only offered once a year)
   • BMED 212 (3): Introduction to Biomedical Engineering Design
   • BMED 310 (4)^: Biomedical Engineering Measurement and Analysis
   • 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 (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

*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 registering for the Writing Proficiency Examination (WPE). 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.
- 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  
  Email  
  Website

6) **Biomedical Engineering (BMED) Department:**

  Location: Building 13, Room 260  
  Phone: 805-756-6400  
  Website