University of Rochester Biomedical Engineering (BME) Program

First 1 ½ yrs - ALL Students

**1st Fall**
- BME 101: Introduction to Biomedical Engineering
- CHM 131: Chemistry I
- MTH 161: Calculus I
- PHY 121: Calculus II
- PHY 122: Physics I
- PHY 121: Mechanics
- CHM 132: Chemistry II
- PHY 122: Physics II
- MTH 162: Calculus II

**1st Spring**
- MTH 164: Multidimensional Calculus
- CHM 131: Chemistry I
- PHY 122: Physics II
- PHY 121: Calculus I
- PHY 122: Physics II
- MTH 162: Calculus II
- PHY 105: Primary Writing

**Soph Fall**
- BME 201 & 201P: Biomechanics & MATLAB
- BIO 110: Biology

**Concentrations**

**Biomechanics**
- ME 226: Solid Mechanics
- ME 123: Thermodynamics
- ME 228: Electr Devs & Cth
- ECE 230: Electromagnetic Waves

**Biosignals & Biosystems**
- ME 229: Digital Signal Processing
- CHE 243: Fluid Dynamics
- CHE 244: Heat & Mass Transfer

**Cell & Tissue Eng**
- CHE 225: Basic Science Elective
- ME 222: Elective

**Medical Optics**
- CHE 225: Basic Science Elective
- ME 222: Elective
- CHE 243: Basic Science Elective

**ALL Students**

**Soph Spring**
- BME 210: Biosystems & Circuits
- CHM 132: Chemistry II
- BME 270: Biomedical Engineering

**JR Fall**
- BME 230: Intro to Signals & Imaging
- CHE 225: Basic Science Elective

**JR Spring**
- BME 211/213/221: Biomedical Computation & Statistics
- ECE 221: Elect Devs & Cth
- BME 210: Elective

**SR Fall**
- BME 295: Design Seminar
- BME 296: Senior Design Project

**SR Spring**
- BME 295: Elective

**Flexibility:** Boxes with diagonal splits represent alternate choices for that semester. Electives and BSE course may be moved between semesters. Use this flexibility to consider options for study abroad, research, minors, or other interests! The Color Code is as follows:

- **BME CORE**
- **Basic Science & Math**
- **Humanities / Soc Sci / Writing**
- **Basic Science Elective**
- **Concentration**
- **Electives**

*Note: Some courses are listed as alternate electives and must be taken in the fall of the sophomore year.*