Bioengineering B.S. Degree: Bioelectronics
2018-2019 Curriculum Chart

Math & Statistics
- MATH 19A: Calculus
- MATH 19B: Calculus
- AMS 10: Math Methods for Engineers I
- AMS 20: Math Methods for Engineers II
- AMS 131: Intro to Probability Theory
- AMS 132: Statistical Inference

Physics
- PHYS 5A/L: Intro to Physics I/Lab
- PHYS 5B/M: Intro to Physics II/Lab
- PHYS 5C/N: Intro to Physics III/Lab

Biology & Biotechnology
- BIOL 20A: Cell & Molecular Biology
- BIOE 20B: Development & Physiology
- BME 140: Bioinstrumentation
  OR
- EE 104: Bioelectronics & Bioinstrumentations

Chemistry
- CHEM 1A: General Chemistry
- CHEM 1B/M: General Chemistry/Lab
- CHEM 1C/N: General Chemistry/Lab

Humanities
- BME 80G: Bioethics in the 21st Century
- CMPE 185: Technical Writing

Computer Engineering
- CMPE 12/L: Computer Systems & Assembly Language/Lab
  Strongly recommended to take one of these classes prior: CMPS 5J, CMPS 5P, CMPS 10 or equivalent
- CMPE 13/L: Computer Systems & C Programming/Lab
- CMPE 100/L: Logic Design/Lab

Electronics
- BME 51A: Applied Electronics I
- BME 51B: Applied Electronics II
- EE 101/L: Intro to Electronic Circuits/Lab
- EE 103/L: Signals & Systems/Lab
- ELECTRONICS ELECTIVE
- ELECTRONICS ELECTIVE

Prior to graduation (beng.soe.ucsc.edu) you must:
1. Submit a Portfolio
2. Complete an Exit Survey
3. Attend an Exit Interview

The capstone options listed are most appropriate for students following the Bioelectronics concentration. Please refer to the General Catalog program statement for full approved design projects and thesis options: https://registrar.ucsc.edu/catalog/programs-courses/program-statements/beng.html.

CMPE 129A, 129B, & 129C: Capstone Project I, II, & III
EE 129A, 129B, & 129C: Capstone Project I, II, & III
CMPE 123A & 123B: Capstone Project I & II

- BME 195: Senior Thesis
- BME 195 (2 credits): Senior Thesis
- BME 123T: Senior Thesis Presentation
- BME 195: Senior Thesis

*Please refer to the Undergraduate Advising website for the list of approved electronics electives.
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**Notes:**

- Courses in which you receive a grade of C-, D+, D, or D- earn credit toward graduation, but cannot be used to satisfy a major requirement or a general education requirement, and cannot satisfy a prerequisite for another course.
- The School of Engineering has different major declaration deadlines than the UCSC Academic/Administrative calendar. Our deadlines and process can be found on: [https://undergrad.soe.ucsc.edu/declare-your-major](https://undergrad.soe.ucsc.edu/declare-your-major)

Ω CMPS 5P Intro. to Prog. in python is recommended for students who have never programmed
- Major qualification requirements for this major can be found at: [https://undergrad.soe.ucsc.edu/major-qualification](https://undergrad.soe.ucsc.edu/major-qualification)