Bioengineering B.S. Degree: Bioelectronics
2016-2017 Curriculum Chart

Math & Statistics

- **MATH 3 or AMS 3 or math placement of 400 or higher**
  - MATH 19A
    - Calculus
    - [F/W/Sp]

- **MATH 19A or 20A**
  - MATH 19B
    - Calculus
    - [F/W/Sp]

- **AMS 3 or Math 3 or math placement of 400 or higher**
  - AMS 10
    - Math Methods for Engineers I
    - [F/Sp]

- **AMS 10 or MATH 21**
  - AMS 10
    - Math Methods for Engineers II
    - [W/Sp]

- **MATH 19B, AMS 10 or MATH 21**
  - AMS 10
    - Math Methods for Engineers I
    - [W/Sp]

- **MATH 19B or MATH 19B or 20B or AMS 11B**
  - AMS 131
    - Intro to Probability Theory
    - [F/Sp]

- **AMS 131 or CMPE 107**
  - AMS 132
    - Statistical Inference
    - [W]

Physics

- **Coreq: MATH 19A or 20A**
  - PHYS 5A/L
    - Intro to Physics I
    - [F/W]

- **MATH 5A/L, MATH 19A or 20A**
  - PHYS 5B/M
    - Intro to Physics II
    - [W]

- **MATH 19B or 20B, Phys 5A/L**
  - PHYS 5C/N
    - Intro to Physics III
    - [Sp]

Chemistry

- **Intro to Probability Theory**
  - CHEM 1A
    - General Chemistry
    - [F/W/Sp]

- **MATH 5A/L, MATH 19A or 20A**
  - PHYS 5B/M
    - Intro to Physics II
    - [W]

Biology & Biotechnology

- **MATH 19A, AMS 10 or MATH 21**
  - AMS 10
    - Math Methods for Engineers II
    - [W/Sp]

- **MATH 19B or MATH 19B or 20B or AMS 11B**
  - AMS 131
    - Intro to Probability Theory
    - [F/Sp]

- **AMS 131 or CMPE 107**
  - AMS 132
    - Statistical Inference
    - [W]

Design Project

- **Prereqs listed below**
  - CMPE/EE 129A
    - Capstone Project I
    - [F]

- **Prereqs listed below**
  - CMPE/EE 129B
    - Capstone Project II
    - [W]

- **CMPE/EE 129C**
  - Capstone Project III
  - [Sp]

Humanities

- **CHEM 1A**
  - BIOL 20A
    - Cell & Molecular Biology
    - [F/W/Sp]

- **BIO 20A**
  - BIO 20B
    - Development & Physiology
    - [F/W/Sp]

- **CHEM 1A**
  - CHEM 1C/N
    - General Chemistry
    - [F/W/Sp]

Electronics

- **MATH 19A**
  - BME 51A
    - Applied Electronics I
    - [W]

- **BME 51B**
  - Applied Electronics II
    - [Sp]

- **PHYS 5C/N or 6C/N, MATH 24 or previous or concurrent enrollment in AMS 20**
  - EE 101/L
    - Intro to Electronic Circuits
    - [F/W]

- **CMPS 12B, or CMPE 12 or BME 160**
  - CMPE 185
    - Technical Writing
    - [F/W/Sp]

- **MATH 19A**
  - BME 51A
    - Applied Electronics I
    - [W]

- **BME 51B**
  - Applied Electronics II
    - [Sp]

- **EE 101/L, AMS 20**
  - EE 103/L
    - Signals & Systems
    - [F/Sp]

- **Two of the following:**
  - CMPE 167/L
    - Sensing and Sensors
    - [W]
  - EE 104
    - Bioelectronics and Bio-instrumentations
    - [S]
  - EE 171/L
    - Analog Electronics
    - [S]

Computer Engineering

- **CMPE 12/L**
  - Computer Systems & Assembly Language
  - Strongly recommended to take one of these classes prior: CMPS 5J, CMPS 5P, CMPS 10 or equivalent
  - [F/W/Sp]

- **CMPE 13/L**
  - Computer Systems & C Programming
  - [W/Sp]

- **CMPE 100/L**
  - Logic Design
  - [W/Sp]

Notes:
- Denotes prerequisites and corequisites.
- 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: http://ua.soe.ucsc.edu/declare
- CMPS 5P Intro to Prog. in python is recommended for students who have never programmed
- Information about the prerequisites and scheduling of courses can change without notice—please check your plan each quarter and adjust for any changes.

Prior to graduation (see beng.soe.ucsc.edu) you must:

1. Submit a Portfolio
2. Complete an Exit Survey
3. Attend an Exit Interview

http://ua.soe.ucsc.edu • advising@soe.ucsc.edu • (831) 459-5840 • 10/17/2016
## Bioengineering B.S. Degree: Bioelectronics
### 2016-2017 Curriculum Chart

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### Bioelectronics Elective Approval Form

**Elective 1:** ___________________________________

Explanation for choice of electives:

_____________________________________________

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**Student Name:**

**Staff Advisor:**

**Faculty Advisor:**

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# Resources

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