### Bioengineering B.S. Degree: Bioelectronics 2015-2016 Curriculum Chart

#### Math & Statistics
- **Math 19A**
  - MATH 19A or MATH 23A
  - Calculus
  - [F / W / Sp]
- **Math 19B**
  - MATH 19B or 20B
  - Vector Calculus
  - [F / W / Sp]
- **AMS 10**
  - Math Methods for Engineers I
  - [F / Sp]
- **AMS 20**
  - Math Methods for Engineers II
  - [W / Sp]
- **AMS 11B or MATH 19B or MATH 11B**
  - Intro to Probability Theory
  - [F]
- **AMS 131 or CMPE 107**
  - AMS 131 or CMPE 107
  - Statistical Inference
  - [W]

*Students may also choose to take MATH 22 in place of MATH 23A.*

#### Physics
- **Coreq: MATH 19A or 20A**
  - PHYS 5A/L
  - Intro to Physics I
  - [F / W]
- **Coreq: MATH 19B or 20B**
  - PHYS 5B/M
  - Intro to Physics II
  - [W]
- **Coreq: MATH 19B or 20B, Phys 5A/L**
  - PHYS 5C/N
  - Intro to Physics III
  - [Sp]

#### Chemistry
- **Coreq: MATH 3**
  - CHEM 1A
  - General Chemistry
  - [F / W / Sp]
- **Coreq: MATH 3**
  - CHEM 1B/M
  - General Chemistry
  - [F / W / Sp]

#### Biology & Biotechnology
- **CHEM 1A, 1B**
  - BIOL 20A
  - Cell & Molecular Biology
  - [F / W / Sp]
- **BIOL 20A**
  - BIOE 20B
  - Development & Physiology
  - [F / W / Sp]
- **BME 5 or BME 101L or EE 101L, or Biol 100, or Boc 100A**
  - BME 140
  - Bioinstrumentation
  - [F]

#### Humanities
- **BME 80G**
  - Bioethics in the 21st Century
  - [F]

#### Design Project OR Senior Thesis
- **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]

*The prerequisites for CMPE 129.A and EE 129.A are different—please plan accordingly.*

*Prerequisites:*
- CMPE 129A: CMPE 129L
- EE 129A: EE 171, CMPE 100, CMPE 185, & previous or concurrent enrollment in EE 157 or CMPE 118 or CMPE 121
- CMPE 129B: CMPE 129A, co-req CMPE 185
- EE 129B: EE 129A

#### Computer Engineering
- **Corequisite: CMPE 12/L**
  - CMPE 13/L
  - Computer Systems & Assembly Language
  - [F / W / Sp]
- **Corequisite: CMPE 12/L**
  - CMPE 100/L
  - Logic Design
  - [W / Sp]

#### Electronics
- **Coreq: MATH 19B or 20B, or MATH 11B**
  - Coreq: PHYS 5C/N or 6C/N
  - BME 101L
  - Applied Circuits
  - [Sp]
- **Coreq: PHYS 5C/N or 6C/N, MATH 24 or previous or concurrent enrollment in AMS 20**
  - EE 101/L
  - Intro to Electronic Circuits
  - [W / Sp]
- **EE 101L, AMS 20**
  - EE 103/L
  - Signals & Systems
  - [F / Sp]
- **EE 103**
  - CMPE 167/L
  - Sensing & Sensor Technologies
  - [W]
- **EE 101/L**
  - EE 171/L
  - Analog Electronics
  - [Sp]

*Electronics Elective*

*Electronics Electives: One Upper-Division Computer or Electrical Engineering Elective, Approved by Faculty Advisor*

### Notes:
- Denotes prerequisites and corequisites.
- Choice of electives will need faculty approval (see back).

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 • 10/22/2015
## Bioengineering B.S. Degree: Bioelectronics
### 2015-2016 Curriculum Chart

<table>
<thead>
<tr>
<th></th>
<th>Fall ______</th>
<th>Winter ______</th>
<th>Spring ______</th>
<th>Summer ______</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Bioelectronics Elective Approval Form

**Elective 1:** ______________________________________

**Explanation for choice of electives:**

_____________________________________________

_____________________________________________

_____________________________________________

_____________________________________________

---

**Student Name:**

**Staff Advisor:**

**Faculty Advisor:**