

# Bioengineering B.S. Degree: Assistive Technology (Motor)

## 2017-2018 Curriculum Chart

<p style="text-align: center;"><b>Math &amp; Statistics</b></p> <ul style="list-style-type: none"> <li>• MATH 3 or Math Placement of 400 or higher <b>MATH 19A</b> Calculus [F/ W/ Sp/ Su]</li> <li>• MATH 19A or 20A <b>MATH 19B</b> Calculus [F/ W/ Sp/ Su]</li> <li>• MATH 3 or math placement score of 400 or higher <b>AMS 10</b> Math Methods for Engineers I [F/ W/ Sp]</li> <li>• MATH 19B and AMS 10 or 10A or MATH 21 <b>AMS 20</b> Math Methods for Engineers II [W/ Sp]</li> <li>• MATH 11B or 19B or 20B or AMS 11B or ECON 11B <b>AMS 131</b> Intro to Probability Theory [F/ W/ Sp/ Su]</li> <li>• AMS 131 or CMPE 107 <b>AMS 132</b> Statistical Inference [W]</li> </ul>	<p style="text-align: center;"><b>Physics</b></p> <ul style="list-style-type: none"> <li>• MATH 19A or 20A <b>PHYS 5A/L</b> Intro to Physics I/Lab [F/ W]</li> <li>• MATH 19A and PHYS 5A/L or 6A/L and AMS 10 or MATH 21 <b>CMPE 9</b> Statics, Dynamics, &amp; Biomechanics [W]</li> <li>• PHYS 5A/L and MATH 19B or 20B <b>PHYS 5C/N</b> Intro to Physics III/Lab [F/ Sp]</li> </ul>	<p style="text-align: center;"><b>Computer Engineering</b></p> <ul style="list-style-type: none"> <li>• <b>CMPE 12/L<sup>Ω</sup></b> Computer Systems &amp; Assembly Language/Lab [Strongly recommended to take one of these classes prior: CMPS 5J, 5P, 10 or equivalent] [F/ W/ Sp]</li> <li>• CMPE 12/L <b>CMPE 13/L</b> Computer Systems &amp; C Programming/Lab [W/ Sp]</li> <li>• CMPE 12/L <b>CMPE 100/L</b> Logic Design/Lab [F/ W/ Sp]</li> <li>• CMPE 12/L, CMPE 100/L and EE 101/L <b>CMPE 118/L</b> Mechatronics/Lab [F]</li> </ul>	<p style="text-align: center;"><b>Chemistry</b></p> <ul style="list-style-type: none"> <li>• Previous or concurrent enrollment in MATH 3 or Math Placement score of 300 or higher <b>CHEM 1A</b> General Chemistry [F/ W/ Sp/ Su]</li> <li>• <b>CHEM 1B/M</b> General Chemistry/Lab [F/ W/ Sp/ Su]</li> </ul>	
<p style="text-align: center;"><b>Electronics</b></p> <ul style="list-style-type: none"> <li>• MATH 19A or 11A with instructor consent <b>BME 51A (4 credits)</b> Applied Electronics I [W]</li> <li>• BME 51A <b>BME 51B (4 credits)</b> Applied Electronics II [Sp]</li> <li>• PHYS 5C/N or 6C/N and MATH 24 or previous or concurrent enrollment in AMS 20 or 20A <b>EE 101/L</b> Intro to Electronic Circuits/Lab [F/ W]</li> <li>• EE 101/L and AMS 20 or 20A <b>EE 103/L</b> Signals &amp; Systems/Lab [F/ Sp]</li> </ul>	<p style="text-align: center;"><b>Humanities</b></p> <ul style="list-style-type: none"> <li>• <b>BME 80G</b> Bioethics in the 21st Century [F]</li> <li>• CMPS 12B or CMPE 12 or BME 160 <b>CMPE 185</b> Technical Writing [F/ W/ Sp]</li> </ul>	<p style="text-align: center;"><b>Biology &amp; Biotech</b></p> <ul style="list-style-type: none"> <li>• <b>CMPE 80A</b> Universal Access [F]</li> <li>OR</li> <li>• <b>CMPE 8</b> Robot Automation [F]</li> <li>• CHEM 1A <b>BIOL 20A</b> Cell &amp; Molecular Biology [F/ W/ Sp/ Su]</li> <li>• BIOL 20A <b>BIOE 20B</b> Development &amp; Physiology [F/ W/ Sp/ Su]</li> <li>• BIOL 20A and BIOE 20B <b>METX 135/L</b> Functional Anatomy/Lab [Sp]</li> </ul>	<p style="text-align: center;"><b>Design Project</b> OR <b>Senior Thesis</b></p> <ul style="list-style-type: none"> <li>• *Prerequisites listed below <b>CMPE 129A, 129B, &amp; 129C</b> Capstone Project I, II, &amp; III 129A [F], 129B [W], 129C [Sp]</li> <li>• *Prerequisites listed below <b>EE 129A, 129B, &amp; 129C</b> Capstone Project I, II, &amp; III 129A [F], 129B [W], 129C [Sp]</li> <li>• *Prerequisites listed below <b>CMPE 123A &amp; 123B</b> Capstone Project I &amp; II 123A [W], 123B [Sp]</li> </ul> <p><b>*Prerequisites:</b>  <b>CMPE 129A:</b> CMPE 121/L  <b>CMPE 129B:</b> previous or concurrent enrollment in CMPE 185  <b>EE 129A:</b> EE 171, CMPE 100, &amp; previous or concurrent enrollment in EE 157, or CMPE 118 or CMPE 121  <b>CMPE 123A:</b> CMPE 121, previous or concurrent enrollment in CMPE 185</p> <ul style="list-style-type: none"> <li>• <b>BME 195</b> Senior Thesis [F]</li> <li>• <b>BME 195 (2 credits)</b> Senior Thesis [W]</li> <li>• <b>BME 195</b> Senior Thesis [S]</li> <li>• BME 185 or CMPE 185 Coreq: BME/CMPE/EE 193 or 195 or 198 <b>BME 123T</b> Senior Thesis Presentation [W]</li> </ul>	
<p style="text-align: center;"><b>Prior to graduation (beng.soe.ucsc.edu)</b> <b>You must:</b></p> <ol style="list-style-type: none"> <li>1. Submit a Portfolio</li> <li>2. Complete an Exit Survey</li> <li>3. Attend an Exit Interview</li> </ol>				<p style="text-align: center;"><b>ELECTRONICS ELECTIVE</b></p> <hr style="width: 50%; margin: auto;"/> <p style="text-align: center;"><i>Please refer to the undergraduate advising website for list of approved electives</i></p>

**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>
- 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://ua.soe.ucsc.edu/major-qualification>

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Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Student Name:
Staff Advisor:
Faculty Advisor: