

Bioengineering B.S. Degree: Assistive Technology (Motor) 2018-2019 Curriculum Chart

<p style="text-align: center;">Math & Statistics</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> MATH 19A Calculus </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> MATH 19B Calculus </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> AMS 10 Math Methods for Engineers I </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> AMS 20 Math Methods for Engineers II </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> AMS 131 Intro to Probability Theory </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> AMS 132 Statistical Inference </div>	<p style="text-align: center;">Physics</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> PHYS 5A/L Intro to Physics I/Lab </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 9 Statics, Dynamics, & Biomechanics </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> PHYS 5C/N Intro to Physics III/Lab </div>	<p style="text-align: center;">Computer Engineering</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 12/L^Ω Computer Systems & Assembly Language/Lab <small>[Strongly recommended to take one of these classes prior: CMPS 5J, 5P, 10 or equivalent]</small> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 13/L Computer Systems & C Programming/Lab </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 100/L Logic Design/Lab </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 118/L Mechatronics/Lab </div>	<p style="text-align: center;">Chemistry</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CHEM 1A General Chemistry </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CHEM 1B/M General Chemistry/Lab </div>		
	<p style="text-align: center;">Electronics</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 51A Applied Electronics I </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 51B Applied Electronics II </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> EE 101/L Intro to Electronic Circuits/Lab </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> EE 103/L Signals & Systems/Lab </div>	<p style="text-align: center;">Humanities</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 80G Bioethics in the 21st Century </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 185 Technical Writing </div>	<p style="text-align: center;">Biology & Biotech</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 80A Universal Access OR CMPE 8 Robot Automation </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BIOL 20A Cell & Molecular Biology </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BIOE 20B Development & Physiology </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> METX 135/L Functional Anatomy/Lab </div>		
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> Prior to graduation (beng.soe.ucsc.edu) You must: </div> <div style="border: 1px solid black; padding: 5px;"> <ol style="list-style-type: none"> 1. Submit a Portfolio 2. Complete an Exit Survey 3. Attend an Exit Interview </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> ELECTRONICS ELECTIVE </div> <hr style="width: 20%; margin: 0 auto;"/> <p style="text-align: center; font-size: small;"><i>Please refer to the undergraduate advising website for list of approved electives</i></p>	<p style="text-align: center;">OR</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p style="text-align: center;">❖ Design Project</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 129A, 129B, & 129C Capstone Project I, II, & III </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> EE 129A, 129B, & 129C Capstone Project I, II, & III </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 123A & 123B Capstone Project I & II </div> </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p style="text-align: center;">❖ Senior Thesis</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 195 Senior Thesis </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 195 (2 credits) Senior Thesis </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 123T Senior Thesis Presentation </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 195 Senior Thesis </div> </td> </tr> </table>		<p style="text-align: center;">❖ Design Project</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 129A, 129B, & 129C Capstone Project I, II, & III </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> EE 129A, 129B, & 129C Capstone Project I, II, & III </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> CMPE 123A & 123B Capstone Project I & II </div>	<p style="text-align: center;">❖ Senior Thesis</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 195 Senior Thesis </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 195 (2 credits) Senior Thesis </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 123T Senior Thesis Presentation </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px; text-align: center;"> BME 195 Senior Thesis </div>
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❖ The capstone options listed are most appropriate for students following the Assistive Technology: Motor 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>.

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Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

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>
- 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/bsoe-major-qualification-requirements>

Student Name: _____

Staff Advisor: _____

Faculty Advisor: _____