

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

2015-2016 Curriculum Chart

Math & Statistics

- MATH 3 or AMS 3 or math placement of 400 or higher
MATH 19A
Calculus [F / W / Sp]
- MATH 19A
MATH 19B
Calculus [F / W / Sp]
- MATH 19B or 20B
MATH 23A*
Vector 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]
- MATH 19B, AMS 10 or MATH 21
AMS 20
Math Methods for Engineers II [W / Sp]
- MATH 11B or MATH 19B or AMS 11B
AMS 131
Intro to Probability Theory [F]
- AMS 131 or CMPE 107
AMS 132
Statistical Inference [W]

**Students may 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]
- MATH 19A, PHYS 5A/L or 6A/L, AMS 10 or MATH 21
CMPE 9
Statics, Dynamics, & Biomechanics [W]
- MATH 19B or 20B, PHYS 5A/L
PHYS 5C/N
Intro to Physics III [Sp]

Electronics

- MATH 19B or 20B, or MATH 11B
Coreq: PHYS 5C/N or 6C/N
BME 101/L
Applied Circuits [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]
- EE 101/L, AMS 20
EE 103/L
Signals & Systems [F / Sp]
- EE 103
CMPE 167/L
Sensing & Sensor Technologies [W]

Humanities

- BME 80G**
Bioethics in the 21st Century [F]
- CMPS 12B or CMPE 12 or BME 160
CMPE 185
Technical Writing [F / W / Sp]

Computer Engineering

- CMPE 12/L**
Computer Systems & Assembly Language
Strongly recommended to take one of these classes prior: CMPS 5J, 5P, 10 or equivalent [F / W / Sp]
- CMPE 12/L
CMPE 13/L
Computer Systems & C Programming [W / Sp]
- CMPE 12/L
CMPE 100/L
Logic Design [W / Sp]
- EE 101/L, CE 12/L & CE 100/L
CMPE 118/L
Mechatronics [F]

Elective

**Upper-Division
PBSci or BSoE Elective**

Chemistry

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

Biology & Biotech

- CMPE 80A**
Universal Access [F / Sp]
- CMPE 8**
Robot Automation [W]
- CHEM 1A, 1B
BIOL 20A
Cell & Molecular Biology [F / W / Sp]
- BIOL 20A
BIOE 20B
Development & Physiology [F / W / Sp]
- BIOL 20A, BIOE 20B
METX 135/L
Functional Anatomy [Sp]

| Design Project | OR | Senior Thesis |
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| <ul style="list-style-type: none"> * Prereqs listed below CMPE/EE 129A Capstone Project I [F] | | <ul style="list-style-type: none"> BME 195 Senior Thesis |
| <ul style="list-style-type: none"> *Prereqs listed below CMPE/EE 129B Capstone Project II [W] | | <ul style="list-style-type: none"> BME 195 Senior Thesis |
| <ul style="list-style-type: none"> •CMPE/EE 129B CMPE/EE 129C Capstone Project III [Sp] | | <ul style="list-style-type: none"> BME 195 Senior Thesis |
| <p><i>The prerequisites for CMPE 129A and EE 129A are different—please plan accordingly.</i></p> <p>*Prerequisites: CMPE 129A: CMPE 121/L EE 129A: EE 171/L, 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 129B</p> | | |
| | | <ul style="list-style-type: none"> BME 123T Senior Thesis Presentation [W] |

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.

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| Fall _____ | Winter _____ | Spring _____ | Summer _____ |
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| Fall _____ | Winter _____ | Spring _____ | Summer _____ |
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| Fall _____ | Winter _____ | Spring _____ | Summer _____ |
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| Fall _____ | Winter _____ | Spring _____ | Summer _____ |
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| <p>Bioengineering Electives Approval Form</p> <p>Elective 1: _____</p> <p>Explanation for choice of electives:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> |
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| <p>Student Name:</p> <p>Staff Advisor:</p> <p>Faculty Advisor:</p> |
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