# Electrical: Biomedical Signals and Systems (Option G)

## September 2017 (students who entered first year prior to September 2016)

### Year 2:

#### Term A
- AM 2270a  Applied Mathematics for Engineering II
- CS 1037a  Computer Science Fundamentals II
- ECE 2205a  Electric Circuits I
- ECE 2240a  Electrical Laboratory
- ECE 2277a  Digital Logic Systems
- ES 2211f  Engineering Communications

#### Term B
- AM 2276b  Applied Mathematics for Elec. & Mech Eng III
- ECE 2231a  Introduction to Electronics
- ECE 2233b  Circuits and Systems
- ECE 2236b  Magnetic Circuits and Transmission Lines
- ECE 2241b  Electrical Laboratory II
- MME 2234b  Heat Transfer and Dynamics

### Year 3:

#### Term A
- AM 3415a  Applied Mathematics for Electrical Engineering II
- ECE 3330a  Control Systems
- ECE 3332a  Electric Machines
- ECE 3337a  Electronic Circuits
- MEDBIO 3330f  Human and Animal Biomechanics
- SS 2141a  Applied Probability and Statistics

#### Term B
- ECE 3331b  Introduction to Signal Processing
- ECE 3336b  Electromagnetic Theory
- ECE 3375b  Microprocessors and Microcomputers
- MEDBIO 3507g  Analysis of Oxygen Transport in Biological Systems
- One 0.5 technical elective
- 0.5 non-technical elective taken from the approved list

### Year 4:

#### Term A
- Bus 2299  Business for Engineers
- ECE 4416  Electrical/Computer Engineering Project
- ECE 4429a  Advanced Digital Signal Processing
- ECE 4437a  Communications Theory
- ECE 4445a  Introduction to Digital Image Processing
- Physiol 2130  Human Physiology

#### Term B
- Bus 2299  Business for Engineers
- ECE 4416  Electrical/Computer Engineering Project
- ECE 4438b  Advanced Image Processing and Analysis
- ECE 4455b  Biomedical Systems Analysis
- ES 4498g  Engineering Ethics, Sustainable Development and the Law
- Physiol 2130  Human Physiology

### Technical Elective List:

Some technical electives may not be offered in a given academic year. Consult the department for accurate listing.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>Biochemistry 2280a</td>
<td>Biochemistry and Molecular Biology</td>
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<tr>
<td>Medical Biophysics 3503G</td>
<td>Fundamentals of Digital Imaging</td>
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<tr>
<td>CBE 4421a</td>
<td>Introduction to Biomaterials Engineering</td>
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