## Computer Engineering – Electronic Devices for Ubiquitous Computing (Option A)

September 2018 (students who entered first year in September 2017)

### Year 2:

#### Term A
- AM 2270a  Applied Mathematics for Engineering II
- CS 1037a  Computer Science Fundamentals II
- ECE 2205a  Electric Circuits 1
- ECE 2240a  Electrical Laboratory
- ECE 2277a  Digital Logic Systems
- Writing 2130f  Building Better (Communication) Bridges: Rhetoric & Professional Communication for Engineers

#### Term B
- AM 2276b  Applied Mathematics for Elec & Mech Eng III
- ECE 2231b  Introduction to Electronics
- ECE 2233b  Circuits and Systems
- ECE 2242b  Principles of Design in Electrical Engineering
- ECE 3375b  Microprocessors and Microcomputers
- ECE 3380b  Advanced Digital Systems

### Year 3:

#### Term A
- CS 2211a  Software Tools and Systems Programming
- Math 2151a  Discrete Structures for Engineering
- ECE 3330a  Control Systems
- ECE 3349a  Introduction of VLSI
- ECE 3389a  Computer System Design
- SE 2203a  Software Design

#### Term B
- CS 2210b  Data Structures and Algorithms
- ECE 2236b  Magnetic Circuits and Transmission Lines
- ECE 3331b  Introduction to Signal Processing
- ECE 3390b  Hardware/Software Co-Design
- SS 2143b  Applied Probability and Statistics
- 0.5 non-technical elective taken from the approved list

### Year 4:

#### Term A
- ECE 4415  Computer Engineering Design Project
- ECE 4436a  Networking
- ECE 4437a  Communications Theory
- SE 3313a  Operating Systems for Software Engineering
- 0.5 non-technical elective taken from approved list
- One 0.5 technical elective

#### Term B
- ECE 4415  Computer Engineering Design Project
- ECE 4460b  Real-Time and Embedded Systems
- ES 4498G  Engineering Ethics, Sustainable Development and the Law
- SE 3314b  Computer Networks Applications
- 0.5 non-technical elective taken from approved list
- One 0.5 technical elective

### NOTES:

Non-technical electives:
Please choose 1.0 credits (one 1.0 credit or two 0.5 credit) courses from the 1000 level and one 0.5 credit from the 2000+ level.

### 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>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECE 3332a/b</td>
<td>Electric Machines</td>
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<tr>
<td>ECE 3333a/b</td>
<td>Electric Power Systems 1</td>
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<td>ECE 3337a/b</td>
<td>Electronic Circuits</td>
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<td>ECE 3370a/b</td>
<td>Communication Electronics 1</td>
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<td>ECE 4429a/b</td>
<td>Advanced Digital Signal Processing</td>
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<td>ECE 4438a/b</td>
<td>Advanced Image Processing &amp; Analysis</td>
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<td>ECE 4445a/b</td>
<td>Introduction to Digital Image Processing</td>
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<td>ECE 4455a/b</td>
<td>Biomedical Systems Analysis</td>
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<td>ECE 4469a/b</td>
<td>Applied Control Systems</td>
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<td>Databases 1</td>
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<td>CS 3340a/b</td>
<td>Analysis of Algorithms 1</td>
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<td>CS 3346a/b</td>
<td>Artificial Intelligence 1</td>
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Maximum one of: