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

### September 2020 (for students who entered first year in September 2019)

### Year 2

#### Term A
- AM 2270A: Applied Mathematics for Engineering II
- CS 1027A: Computer Science Fundamentals II
- ECE 2205A: Electric Circuits I
- ECE 2240A: Electrical Laboratory
- ECE 2277A: Digital Logic Systems
- Writ 2130F: Building Better (Communication) Bridges: Rhetoric & Professional Communication for Engineers

#### Term B
- 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
- One 0.5 non-technical elective

#### 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
- SE 2203b: Software Design
- SS 2143B: Applied Statistics and Data Analysis for Engineers

### Year 4

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

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

### 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 course from the 2000 (or higher) level.

**Technical Electives**
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>Course Title</th>
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<tbody>
<tr>
<td>ECE 3332A/B</td>
<td>Electric Machines</td>
</tr>
<tr>
<td>ECE 3333A/B</td>
<td>Electric Power Systems I</td>
</tr>
<tr>
<td>ECE 3337A/B</td>
<td>Electronic Circuits</td>
</tr>
<tr>
<td>ECE 3370A/B</td>
<td>Communication Electronics I</td>
</tr>
<tr>
<td>ECE 4429A/B</td>
<td>Advanced Digital Signal Processing</td>
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<tr>
<td>ECE 4438A/B</td>
<td>Advanced Image Processing and Analysis</td>
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<tr>
<td>ECE 4445A/B</td>
<td>Introduction to Digital Image Processing</td>
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<tr>
<td>ECE 4455A/B</td>
<td>Biomedical Systems Analysis</td>
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<tr>
<td>ECE 4469A/B</td>
<td>Applied Control Systems</td>
</tr>
<tr>
<td>SE 4460 A/B</td>
<td>Machine Learning &amp; Design</td>
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</tbody>
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**Maximum one of:**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CS 3319A/B</td>
<td>Databases I</td>
</tr>
<tr>
<td>CS 3340A/B</td>
<td>Analysis of Algorithms I</td>
</tr>
<tr>
<td>CS 3346A/B</td>
<td>Artificial Intelligence I</td>
</tr>
</tbody>
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The official version of the academic calendar can be found at: [www.westerncalendar.uwo.ca](http://www.westerncalendar.uwo.ca)
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