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

**September 2020** *(for students who entered first year in September 2017 or 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
- 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 4436A Networking: Principles, Protocols & Architecture
- 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

### 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>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 3322A/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>
</tr>
<tr>
<td>ECE 4438A/B</td>
<td>Advanced Image Processing and Analysis</td>
</tr>
<tr>
<td>ECE 4445A/B</td>
<td>Introduction to Digital Image Processing</td>
</tr>
<tr>
<td>ECE 4455A/B</td>
<td>Biomedical Systems Analysis</td>
</tr>
<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>
</tr>
</tbody>
</table>

**Maximum one of:**

- CS 3319A/B Databases I
- CS 340A/B Analysis of Algorithms I
- CS 346A/B Artificial Intelligence I

---

*The official version of the academic calendar can be found at: [www.westerncalendar.uwo.ca](http://www.westerncalendar.uwo.ca)*