# Electrical Engineering: Power Systems (Option E)

**September 2020 (for 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 I
- **ECE 2277A** Digital Logic Systems
- **ECE 2240A** Electrical Laboratory
- **Writ 2130F** Building Better (Communication) Bridges: Rhetoric & Professional Communication for Engineers

### Term B
- **AM 2276B** Applied Mathematics for Elec. & Mech. Engineering III
- **ECE 2231B** Introduction to Electronics
- **ECE 2233B** Circuits and Systems
- **ECE 2236B** Magnetic Circuits and Transmission Lines
- **ECE 2242B** Principles of Design in Electrical Engineering
- **MME 2234B** Heat Transfer and Dynamics

## Year 3

### Term A
- **AM 3415A** Applied Math for Electrical Engineering
- **ECE 3330A** Control Systems
- **ECE 3332A** Electric Machines
- **ECE 3337A** Electronic Circuits
- **SS 2141A** Applied Probability and Statistics for Engineers
- One 0.5-credit non-technical elective from approved list (either term)

### Term B
- **ECE 3331B** Introduction to Signal Processing
- **ECE 3333B** Electric Power Systems I
- **ECE 3336B** Electromagnetic Theory
- **ECE 3370B** Communication Electronics I
- **ECE 3375B** Microprocessors and Microcomputers
- **ECE 3399B** Principles and Practices of Design of Electronic Systems

## Year 4

### Term A
- **ECE 4416** Electrical/Computer Engineering Project
- **ECE 4429A** Advanced Digital Signal Processing
- **ECE 4437A** Communications Theory
- **ECE 4457A** Power Electronics
- **ECE 4464A** Electric Power Systems II
- One 0.5-credit non-technical elective from approved list

### Term B
- **ECE 4416** Electrical/Computer Engineering Project
- **ECE 4439B** Conventional, Renewable & Nuclear Energy
- **ECE 4456B** Power Systems Protection
- **ES 4498G** Engineering Ethics, Sustainable Development & the Law
- One 0.5-credit non-technical elective from approved list
- One 0.5-credit 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 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.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECE 3349A/B</td>
<td>Introduction to VLSI</td>
</tr>
<tr>
<td>ECE 3380A/B</td>
<td>Advanced Digital Systems</td>
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<tr>
<td>ECE 4430A/B</td>
<td>Selected Topics in Electrical Engineering I</td>
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<tr>
<td>ECE 4431A/B</td>
<td>Selected Topics in Electrical Engineering II</td>
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<tr>
<td>ECE 4432A/B</td>
<td>Radiation and Propagation</td>
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<tr>
<td>ECE 4433A/B</td>
<td>Digital Communications Systems</td>
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<tr>
<td>ECE 4438A/B</td>
<td>Advanced Image Processing &amp; 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 4451A/B</td>
<td>Advanced Topics in Wireless Communications</td>
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<td>ECE 4455A/B</td>
<td>Biomedical Systems Analysis</td>
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<td>ECE 4460A/B</td>
<td>Real-Time Embedded Systems</td>
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<td>ECE 4468A/B</td>
<td>Systems Optimization</td>
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<tr>
<td>ECE 4469A/B</td>
<td>Applied Control Systems</td>
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<tr>
<td>MME 4452A/B</td>
<td>Robotics and Manufacturing Automation</td>
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<td>MME 4473A/B</td>
<td>Computer Integrated Manufacturing</td>
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<td>MME 4482A/B</td>
<td>Fundamentals of MEMS</td>
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<td>MME 4487A/B</td>
<td>Mechatronic System Design</td>
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<tr>
<td>SE 4460A/B</td>
<td>Machine Learning &amp; Design</td>
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The official version of the academic calendar can be found at: www.westerncalendar.uwo.ca