# Electrical Engineering and Business (Option B)

**September 2022 (for students who entered first year in September 2018)**

## 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
- BUS 2257 Accounting & Business Analysis

### Term B
- 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
- BUS 2257 Accounting & Business Analysis

## Year 3: HBA 1

## Year 4

### Term A
- AM 3415A Applied Mathematics for Electrical Engineering II
- ECE 3330A Control Systems
- ECE 3332A Electric Machines
- ECE 3337A Electronic Circuits
- SS 2141A Applied Statistics and Data Analysis
- BUS 4569 Ivey Field Project

### Term B
- ECE 3331B Introduction to Signal Processing
- 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 5

### Term A
- ECE 4416 Electrical/Computer Engineering Project
- ECE 4429A Advanced Digital Signal Processing
- ECE 4437A Communications Theory

#### 1.5 HBA required courses**

- International Perspective Requirement: Business 4505A/B.
- Corporations and Society Requirement: 0.5-credit from Business Administration – Corporations and Society offered during the academic year to satisfy this requirement.
- Managerial Accounting Requirement: Business 4624A/B

### Term B
- ECE 4416 Electrical/Computer Engineering Project
- ELI 4110G Engineering Ethics, Sustainable Development & the Law

#### Three 0.5-credit Business electives from 4000 level Business courses

## 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 Name</th>
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</thead>
<tbody>
<tr>
<td>ECE 3349A/B</td>
<td>Introduction of VLSI</td>
</tr>
<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>
</tr>
<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>
</tr>
<tr>
<td>ECE 4439A/B</td>
<td>Conventional, Renewable &amp; Nuclear Energy</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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<tr>
<td>ECE 4455A/B</td>
<td>Biomedical Systems Analysis</td>
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<tr>
<td>ECE 4456A/B</td>
<td>Power Systems Protection</td>
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<tr>
<td>ECE 4457A/B</td>
<td>Power Electronics</td>
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<tr>
<td>ECE 4460A/B</td>
<td>Real-Time and Embedded Systems</td>
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<tr>
<td>ECE 4464A/B</td>
<td>Electric Power Systems II</td>
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<tr>
<td>ECE 4468A/B</td>
<td>Systems Optimization</td>
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<td>ECE 4469A/B</td>
<td>Applied Control Systems</td>
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<td>MME 4452A/B</td>
<td>Robotics and Manufacturing Automation</td>
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<tr>
<td>MME 4473A/B</td>
<td>Computer Integrated Manufacturing</td>
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<tr>
<td>MME 4482A/B</td>
<td>Fundamentals of MEMS</td>
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<tr>
<td>MME 4487A/B</td>
<td>Mechatronic System Design</td>
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<tr>
<td>SE 4460 A/B</td>
<td>Machine Learning &amp; Design</td>
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