

## Electrical Engineering and Business (Option B)

**September 2025** (for students who entered first year in September 2018 or later)

<p><b>Year 2</b></p> <p><b>Term A</b></p> <p>NMM 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  BUS 2257 Accounting &amp; Business Analysis</p> <p><b>Term B</b></p> <p>NMM 2276B Applied Mathematics for Elec. &amp; 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  BUS 2257 Accounting &amp; Business Analysis</p> <p><b>Year 3: HBA 1</b></p> <p><b>Year 4</b></p> <p><b>Term A</b></p> <p>NMM 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</p> <p><b>Term B</b></p> <p>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</p> <p><b>Year 5</b></p> <p><b>Term A</b></p> <p>ECE 4416 Electrical/Computer Engineering Project  ECE 4429A Advanced Digital Signal Processing  ECE 4437A Communications Theory  One 0.5-credit technical elective  1.5 HBA required courses**</p> <p><b>Term B</b></p> <p>ECE 4416 Electrical/Computer Engineering Project  ELI 4110G Engineering Ethics, Sustainable Development &amp; the Law  Three 0.5-credit Business electives from 4000 level Business courses</p>	<p><b>NOTES:</b></p> <p><b>**1.5 HBA required courses:</b></p> <ul style="list-style-type: none"> <li>International Perspective Requirement: Business 4505A/B.</li> <li>Corporations and Society Requirement: 0.5-credit from Business Administration – Corporations and Society offered during the academic year to satisfy this requirement.</li> <li>Managerial Accounting Requirement: Business 4624A/B</li> </ul> <p><b>Technical Electives</b></p> <p>Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.</p> <table border="1"> <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></tr> <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></tr> <tr><td>ECE 4433A/B</td><td>Digital Communications Systems</td></tr> <tr><td>ECE 4436A/B</td><td>Networking: Principles, Protocols &amp; Architecture</td></tr> <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></tr> <tr><td>ECE 4445A/B</td><td>Introduction to Digital Image Processing</td></tr> <tr><td>ECE 4451A/B</td><td>Advanced Topics in Wireless Communications</td></tr> <tr><td>ECE 4455A/B</td><td>Biomedical Systems Analysis</td></tr> <tr><td>ECE 4456A/B</td><td>Power Systems Protection</td></tr> <tr><td>ECE 4457A/B</td><td>Power Electronics</td></tr> <tr><td>ECE 4460A/B</td><td>Real-Time and Embedded Systems</td></tr> <tr><td>ECE 4464A/B</td><td>Electric Power Systems II</td></tr> <tr><td>ECE 4468A/B</td><td>Systems Optimization</td></tr> <tr><td>ECE 4469A/B</td><td>Applied Control Systems</td></tr> <tr><td>MME 4452A/B</td><td>Robotics and Manufacturing Automation</td></tr> <tr><td>MME 4473A/B</td><td>Computer Integrated Manufacturing</td></tr> <tr><td>MME 4482A/B</td><td>Fundamentals of MEMS</td></tr> <tr><td>MME 4487A/B</td><td>Mechatronic System Design</td></tr> </tbody> </table>	ECE 3349A/B	Introduction of VLSI	ECE 4430A/B	Selected Topics in Electrical Engineering I	ECE 4431A/B	Selected Topics in Electrical Engineering II	ECE 4432A/B	Radiation and Propagation	ECE 4433A/B	Digital Communications Systems	ECE 4436A/B	Networking: Principles, Protocols & Architecture	ECE 4438A/B	Advanced Image Processing & Analysis	ECE 4439A/B	Conventional, Renewable & Nuclear Energy	ECE 4445A/B	Introduction to Digital Image Processing	ECE 4451A/B	Advanced Topics in Wireless Communications	ECE 4455A/B	Biomedical Systems Analysis	ECE 4456A/B	Power Systems Protection	ECE 4457A/B	Power Electronics	ECE 4460A/B	Real-Time and Embedded Systems	ECE 4464A/B	Electric Power Systems II	ECE 4468A/B	Systems Optimization	ECE 4469A/B	Applied Control Systems	MME 4452A/B	Robotics and Manufacturing Automation	MME 4473A/B	Computer Integrated Manufacturing	MME 4482A/B	Fundamentals of MEMS	MME 4487A/B	Mechatronic System Design
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