

## Mechatronics Engineering and Business (Option B)

September 2021 (for students who entered first year in September 2016)

<p><b>Year 2</b></p> <p><b>Term A</b></p> <p>AM 2270A Applied Mathematics for Engineering II          ECE 2205A Electric Circuits I          MSE 2200Q Engineering Shop Safety Training          MSE 2201A Introduction to Electrical Instrumentation          MSE 2212A Mechanics of Materials          MSE 2214A Thermodynamics          CS 1037A Computer Science Fundamentals II          BUS 2257 Accounting &amp; Business Analysis</p> <p><b>Term B</b></p> <p>AM 2276B Applied Math for Electrical &amp; Mechanical Eng. III          MSE 2202B Introduction to Mechatronic Design          MSE 2213B Engineering Dynamics          MSE 2233B Circuits and Systems          MSE 2273B Introduction to Heat Transfer and Fluid Mechanics.          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>AM 3415A Applied Math for Electrical Engineering          SS 2141A Applied Probability and Statistics for Engineers          ECE 2277A Digital Logic Systems          ECE 3330A Control Systems          MSE 3301A Materials Selection and Manufacturing Processes          MSE 3310A Electric Motors and Drives          MSE 3381A Kinematics and Dynamics of Machines          BUS 4569 Ivey Field Project</p> <p><b>Term B</b></p> <p>ECE 3331B Signal Processing          ECE 3375B Microprocessors and Microcomputers          MSE 3302B Sensors and Actuators          MSE 3360B Finite Element Methods for Mechanical Engineering          MSE 3380B Machine Component Design for Mechatronic Systems</p> <p><b>Year 5</b></p> <p><b>Term A</b></p> <p>MSE 4401A Robotic Manipulators          MSE 4499 Mechatronic Design Project          1.5 HBA required courses**          One 0.5-credit technical elective</p> <p><b>Term B</b></p> <p>MSE 4499 Mechatronic Design Project          ES 4498G Engineering Ethics, Sustainable Development &amp; the Law          One 0.5-credit technical elective          2.0 credits of Business electives chosen 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>          Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.</p> <table border="1"> <tr> <td>ECE 4455A/B</td> <td>Biomedical Systems Analysis</td> </tr> <tr> <td>ECE 4460A/B</td> <td>Real-time and Embedded Systems</td> </tr> <tr> <td>ECE 4469A/B</td> <td>Applied Control Systems</td> </tr> </table>	ECE 4455A/B	Biomedical Systems Analysis	ECE 4460A/B	Real-time and Embedded Systems	ECE 4469A/B	Applied Control Systems
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