# Mechatronics Engineering and Business (Option B)

## September 2021 (for students who entered first year in September 2019)

## Year 2
### Term A
- AM 2270A  Applied Mathematics for Engineering II
- ECE 2205A  Electric Circuits I
- MSE 2200Q  Engineering Shop Safety Training
- MSE 2201A  Introduction to ElectricalInstrumentation
- MSE 2212A  Mechanics of Materials
- MSE 2214A  Thermodynamics
- CS 1037A  Computer Science Fundamentals II
- BUS 2257  Accounting & Business Analysis

### Term B
- AM 2276B  Applied Math for Electrical & 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 & Business Analysis

## Year 3: HBA 1

## Year 4
### Term A
- NMM 3415A  Applied Math for Electrical Engineering
- 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

### Term B
- 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

## Year 5
### Term A
- MSE 4401A  Robotic Manipulators
- MSE 4499  Mechatronic Design Project
- SS 2141A  Applied Probability and Statistics for Engineers
- ELI 4110F  Engineering Ethics, Sustainable Development & the Law

1.5 HBA required courses**

### Term B
- MSE 4499  Mechatronic Design Project
- Two 0.5-credit technical elective
- Three 0.5 Business courses at the 4000 level

## 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 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>
</tbody>
</table>

**Notes:**

**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