

# **Mechatronics Engineering and Business (Option B)**

September 2024 (for students who entered first year in September 2018 or later)

Year 2	
Term A	
NMM 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 & Business Analysis
Term B	
NMM 2276B	Applied Math for Electrical & Mechanical Eng. III
MSE 2202B	Introduction to Mechatronic Design

**Engineering Dynamics** 

Introduction to Heat Transfer and Fluid Mechanics

Circuits and Systems

### Year 3: HBA 1

MSE 2213B

MSE 2233B

MSE 2273B

BUS 2257

## Year 4

### Term A

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

Accounting & Business Analysis

Term B	
MSE 2221b	Computational Methods in Mechatronic Systems
	Engineering
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

IVISE 4401A	Robotic Manipulators
MSE 4499	Mechatronic Design Project
SS 21/11/	Applied Probability and Statist

Applied Probability and Statistics for Engineers ELI 4110F Engineering Ethics, Sustainable Development & the

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

### **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

#### **Technical Electives**

Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.

ECE 4455A/B	Biomedical Systems Analysis
ECE 4460A/B	Real-time and Embedded Systems
ECE 4469A/B	Applied Control Systems