

Mechatronics Engineering and Business (Option B)

September 2021 (for students who entered first year in September 2020)

<u>Year 2</u>	
Term A	١
NIMIA	2

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

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

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

