

Integrated Engineering and Business Option

September 2026 (for students who entered first year in September 2025 or later)

Year 2:

Term A

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|-----------|--|
| IE 2298 | Integrated System Engineering & Design |
| NMM 2270a | Applied Mathematics for Engineering II |
| CEE 2220a | Introduction to Structural Theory |
| ECE 2277a | Digital Logic Systems |
| MME 2204a | Thermodynamics I |
| IE 2200Y | Practical Elements in Integrated Engineering |
| Bus 2257 | Accounting and Business Analysis |

Term B

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|-----------|--|
| IE 2298 | Integrated System Engineering & Design |
| NMM 2276b | Applied Mathematics for Elect. and Mech. Engineering III |
| CBE 2221b | Fluid Flow |
| MME 2285b | Engineering Experimentation |
| IE 2200Y | Practical Elements in Integrated Engineering |
| Bus 2257 | Accounting and Business Analysis |

Year 3: HBA 1

Year 4:

Term A

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| ELI 3000a | Managing the Innovation Process |
| CBE 2220a | Chemical Process Calculations |
| CBE 3322a | Heat Transfer Operations |
| CEE 2202a | Mechanics of Materials |
| MME 3374a | Electrical Eng. Foundations for Mechanical Engineering |
| Bus 4569 | Ivey Field Project |

Term B

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|-----------|--|
| ELI 3100b | Engineering Planning and Project Management* |
| MSE 2213b | Engineering Dynamics |
| CBE 2291b | Computational Methods |
| MSE 3360b | Finite Element Methods for Mechanical Engineering |
| ELI 4110g | The Ethical Engineer** |
| SS 2143b | Applied Statistics and Data Analysis for Engineers |
| Bus 4569 | Ivey Field Project |

Year 5:

Term A

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| IE 4499 | Interdisciplinary Engineering Design Project |
| ELI 4100a | Engineering Leadership |
| 0.5 technical elective | |
| 1.5 HBA required courses*** | |

Term B

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|---|--|
| IE 4499 | Interdisciplinary Engineering Design Project |
| Two 0.5 technical electives | |
| 1.5 Business electives chosen from 4000 level Business courses. | |

NOTES:

*ELI 4300 and ELI 4400 are acceptable alternatives to ELI 3100. Some ELI courses may be offered in the Summer term.

**ELI 4110 may be taken in a different semester in order to accommodate desired technical electives and their pre-requisites.

***1.5 HBA required courses:

- International Perspective Requirement: Business 4505a/b
- Corporations and Society Requirement: 0.5 course from Business Administration – Corporations and Society offered during the academic year to satisfy this requirement.
- Managerial Accounting Requirement: Business 4624a/b

Technical Elective List:

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

| Chemical and Biochemical Engineering : | |
|--|---|
| CBE 2290a/b | Fundamentals of Biochemical and Environmental Engineering |
| CBE 3310a/b | Process Dynamics and Control |
| CBE 3324a/b | Mass Transfer Operations |
| CBE 4409a/b | Wastewater Treatment |
| CBE 4421a/b | Introduction to Biomaterials Engineering |
| Civil and Environmental Engineering: | |
| CEE 3348a/b | Project Management and Engineering Cases |
| CEE 3362a/b | Drinking Water Quality and Treatment |
| CEE 4405a/b | Air Pollution |
| CEE 4418a/b | Systems Approach for Civil and Environmental Engineering |
| CEE 4458a/b | Risk Analysis and Decision Making in Engineering |
| CEE 4465a/b | Environmental Design for Waste Disposal |
| CEE 4477a/b | Environmental Applications of Nanotechnology |
| Electrical and Computer Engineering: | |
| ECE 3349a/b | Introduction of VLSI |
| ECE 3375a/b | Microprocessors and Microcomputers |
| ECE 4436a/b | Networking: Principles, Protocols, and Architecture |
| ECE 4468a/b | Systems Optimization |
| SE 3314a/b | Computer Networks Applications |
| Mechanical and Materials Engineering: | |
| MME 3348a/b | Manufacturing Processes |
| MME 3379a/b | Materials Selection |
| MME 3381a/b | Kinematics and Dynamics of Machines |
| MME 4452a/b | Robotics and Manufacturing Automation |
| MME 4473a/b | Computer Integrated Manufacturing (CIM) |
| MME 4487a/b | Mechatronic System Design |
| MME 4492a/b | Production Management for Engineers |