

## Integrated Engineering

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

### Year 2:

#### Term A

IE 2298	Integrated System Engineering & Design
NMM 2270a	Applied Mathematics for Engineering II
CEE 2220a	Introduction to Structural Theory
CBE 2220a	Chemical Process Calculations
ECE 2277a	Digital Logic Systems
MME 2204a	Thermodynamics I
IE 2200Y	Practical Elements in Integrated Engineering

#### Term B

IE 2298	Integrated System Engineering & Design
NMM 2276b	Applied Mathematics for Elect. and Mech. Engineering III
CBE 2221b	Fluid Flow
MME 2285b	Engineering Experimentation
SS 2143b	Applied Statistics and Data Analysis for Engineers
IE 2200Y	Practical Elements in Integrated Engineering

### Year 3:

#### Term A

ELI 3000a	Managing the Innovation Process
CBE 3322a	Heat Transfer Operations
CEE 2202a	Mechanics of Materials
MME 3374a	Electrical Eng. Foundations for Mechanical Engineering
MSE 3301a	Materials Selection & Manufacturing Processes
One 0.5 technical elective	

#### Term B

ELI 3100b	Engineering Planning and Project Management**
CEE 2221b	Structural Theory and Design II
MSE 2213b	Engineering Dynamics
CBE 2291b	Computational Methods
MSE 3360b	Finite Element Methods in Mechanical Engineering
One 0.5 non-technical elective*	

### Year 4:

#### Term A

IE 4499	Interdisciplinary Engineering Design Project
ELI 4100a	Engineering Leadership
ELI 4110f	The Ethical Engineer***
One 0.5 IE technical electives	

#### Term B

IE 4499	Interdisciplinary Engineering Design Project
ELI 4200b	The Entrepreneurial Environment**
2.5 technical electives	

The technical electives listed here are recommended technical electives from each department. Other courses may be taken if prerequisite requirements are satisfied, some requiring instructor permissions (consult your Academic Advisor and/or Program Director).

### Important:

Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Advisor.

#### \*Non-technical Electives:

[http://www.eng.uwo.ca/undergraduate/upper\\_year/electives.html](http://www.eng.uwo.ca/undergraduate/upper_year/electives.html)

Non-technical electives may be taken in a later year in order to complete pre-requisites for desired technical electives in the final year.

\*\*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.

\*ELI 3100A/B may be taken in Year 3 or Year 4 to balance course load if it is needed

#### Technical Elective List:

Chemical and Biochemical Engineering :	
CBE 2224a/b	Chemical Engineering Thermodynamics
CBE 2290a/b	Fundamentals of Biochemical and Environmental Engineering
CBE 3307a/b	Energy and Environment
CBE 3310a/b	Process Dynamics and Control
CBE 3315a/b	Reaction Engineering
CBE 3316a/b	Sustainable Chem. Eng. & Life Cycle Analysis
CBE 3318a/b	Intro to Chemical Process Simulation
CBE 3324a/b	Mass Transfer Operations
CBE 4409a/b	Wastewater Treatment
CBE 4421a/b	Introduction to Biomaterials Engineering
CBE 4485a/b	Energy and Society
Civil and Environmental Engineering:	
CEE 3340a/b	Analysis of Indeterminate Structures
CEE 3348a/b	Project Management and Engineering Cases
CEE 3355a/b	Municipal Engineering Design
CEE 3361a/b	Water Resources Management
CEE 3362a/b	Drinking Water Quality and Treatment
CEE 3386a/b	Groundwater & Contaminant Transport Modeling
CEE 4402a/b	Smart Mobility
CEE 4405a/b	Air Pollution
CEE 4412a/b	Intelligent Transportation Systems
CEE 4418a/b	Systems Approach for Civil and Environmental Engineering
CEE 4438a/b	Introduction to Wood Design
CEE 4458a/b	Risk Analysis and Decision Making in Engineering
CEE 4465a/b	Environmental Design for Waste Disposal
CEE 4478a/b	Case Studies in Civil Engineering
CEE 4479a/b	Subsurface Contamination by Hazardous Industrial
Electrical and Computer Engineering:	
ECE 3375a/b	Microprocessors and Microcomputers
ECE 4436a/b	Networking: Principles, Protocols, and Architecture
SE 3314a/b	Computer Networks Applications
Integrated Engineering	
IE 4490a/b	Integrated Engineering Undergraduate Research
IE 4491a/b	Integrated Engineering Undergraduate Research

	<b>Mechanical and Materials Engineering:</b>	
	MME 3348a/b	Manufacturing Process
	MME 3379a/b	Materials Selection
	MME 3381a/b	Kinematics and Dynamics of Machines
	MME 4452a/b	Robotics and Manufacturing Automation
	MME 4459a/b	Advance CAE
	MME 4473a/b	Computer Integrated Manufacturing (CIM)
	MME 4487a/b	Mechatronic System Design
	MME 4490a/b	Engineering in a global context
	MME 4492a/b	Production Management for Engineers
	Some technical electives may not be offered in a given academic year. Consult the Department for accurate listing.	