### Integrated Engineering

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

#### Year 2:

**Term A**
- AM 2270a Applied Mathematics for Engineering II
- CEE 2220a Introduction to Structural Theory
- ECE 2277a Digital Logic Systems
- MSE 2214a Thermodynamics I
- IE 2297a Integrated System Engineering & Design

One 0.5 non-technical elective

**Term B**
- AM 2276b Applied Mathematics for Electrical and Mechanical Engineering III
- CBE 2221b Fluid Flow
- CBE 2291b Computational Methods for Engineers
- ECE 2238b Introduction to Electrical Engineering
- SS 2143b Applied Statistics and Data Analysis for Engineers

One 0.5 non-technical elective

#### Year 3:

**Term A**
- ELI 3000a Managing the Innovation Process
- CBE 2220a Chemical Process Calculations
- CBE 3322a Heat Transfer Operations
- CEE 2202a Mechanics of Materials
- ECE 3374a Introduction to Electronics for Mechanical Engineering
- MSE 3301a Materials Selection & Manufacturing Processes

**Term B**
- ELI 3200b New Venture Creation
- CBE 2221b Structural Theory and Design II
- MSE 2213b Engineering Dynamics
- MME 2285b Engineering Experimentation
- MSE 3360b Finite Element Methods in Mechanical Engineering
- ELI 4110g Engineering Ethics, Sustainable Development and the Law

#### Year 4:

**Term A**
- IE 4499 Interdisciplinary Engineering Design Project
- ELI 4100a Engineering Leadership

Three 0.5 technical electives

**Term B**
- IE 4499 Interdisciplinary Engineering Design Project
- ELI 4200b The Entrepreneurial Environment

Three 0.5 technical electives

The technical electives listed here are recommended technical electives from each department. Other courses may be taken if prerequisite requirements are satisfied.

### NOTES:

**Non-technical Electives:**

For a list of approved non-technical electives, please visit:  
http://www.eng.uwo.ca/undergraduate/upper_year/electives.html

**Technical Elective List:**

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

<table>
<thead>
<tr>
<th>Chemical and Biochemical Engineering</th>
<th>Civil and Environmental Engineering:</th>
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<tbody>
<tr>
<td>CBE 2290a/b Fundamentals of Biochemical and Environmental Engineering</td>
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<td>CBE 3310a/b Process Dynamics and Control</td>
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<td>CBE 3324a/b Mass Transfer Operations</td>
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<td>CBE 4409a/b Wastewater Treatment</td>
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<tr>
<td>CBE 4421a/b Introduction to Biomaterials Engineering</td>
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<td>CEE 3348a/b Project Management and Engineering Cases</td>
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<td>CEE 3362a/b Drinking Water Quality and Treatment</td>
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<td>CEE 4405a/b Air Pollution</td>
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<td>CEE 4418a/b Systems Approach for Civil and Environmental Engineering</td>
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<td>CEE 4458a/b Risk Analysis and Decision Making in Engineering</td>
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<td>CEE 4465a/b Environmental Design for Waste Disposal</td>
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<tr>
<td>CEE 4477a/b Environmental Applications of Nanotechnology</td>
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**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 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

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The official version of the academic calendar can be found at: [www.westerncalendar.uwo.ca](http://www.westerncalendar.uwo.ca)