# Chemical: General Chemical Engineering (Option A)

**September 2023** (students who entered *first year* in September 2018 or later)

## Year 2:

### Term A
- NMM 2270a Applied Math for Engineering II (Formerly AM 2270A)
- CBE 2206a Introductory Industrial Organic Chemistry
- CBE 2214a Engineering Thermodynamics
- CBE 2220a Chemical Process Calculations
- CBE 2290a Fundamentals of Biochemical and Environmental Engineering
- Writing Building Better (Communication) Bridges: Rhetoric & 2130f Professional Communication for Engineers

### Term B
- NMM 2277b Applied Math Chemical and Civil Engineering III (Formerly AM 2277b)
- CBE 2207b Applied Industrial Organic Chemistry
- CBE 2221b Fluid Flow
- CBE 2224b Chemical Eng. Thermodynamics
- CBE 2291b Computational Methods for Engineering
- SS 2143b Applied Statistics and Data Analysis for Engineers

## Year 3:

### Term A
- CBE 3307a Energy & Environment
- CBE 3315a Reaction Engineering
- CBE 3318a Introduction to Chemical Process Simulation
- CBE 3322a Heat Transfer Operations
- CBE 3395y Chemical Engineering Lab
- One 0.5 Non-technical elective

### Term B
- CBE 3310b Process Dynamics and Control
- CBE 3316b Sustainable Chemical Engineering & Life Cycle Analysis
- CBE 3319b Introduction to Plant Design and Safety
- CBE 3323b Staged Operations
- CBE3324b Mass Transfer Operations
- CBE 3395y Chemical Engineering Lab
- One 0.5 Non-technical elective

## Year 4:

### Term A
- CBE 4497 Chemical Process and Plant Design
- Three 0.5 Technical electives
- One 0.5 Non-technical elective taken from approved list

### Term B
- CBE 4497 Chemical Process and Plant Design
- ELI 4110g Engineering Ethics, Sustainable Development and the Law
- Three 0.5 Technical electives

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**NOTES:**

**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 Counsellor.

**Non-technical Electives:**
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>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CBE 4404a/b</td>
<td>Downstream Processing in Pharmaceutical Manufacturing</td>
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<tr>
<td>CBE 4405a/b</td>
<td>Air Pollution</td>
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<tr>
<td>CBE 4407a/b</td>
<td>Solid Waste Treatment</td>
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<td>CBE 4411a/b</td>
<td>Engineering Coffee</td>
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<tr>
<td>CBE 4413a/b</td>
<td>Selected Topic in Chemical Engineering</td>
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<tr>
<td>CBE 4415</td>
<td>Chemical Engineering Project</td>
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<tr>
<td>CBE 4416a/b</td>
<td>Carbon Footprint &amp; Management</td>
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<td>CBE 4417a/b</td>
<td>Catalytic Processes</td>
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<td>CBE 4418a/b</td>
<td>Industrial Multiphase Reactor Design</td>
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<td>CBE 4420a/b</td>
<td>Computer Process Control</td>
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<td>CBE 4424a/b</td>
<td>Biosensor Principles and Applications</td>
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<tr>
<td>CBE 4428a/b</td>
<td>Introduction to Nanoengineering</td>
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<tr>
<td>CBE 4432a/b</td>
<td>Energy and Fuels Production Systems</td>
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<tr>
<td>CBE 4463a/b</td>
<td>Water Pollution Design</td>
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<td>CBE 4485a/b</td>
<td>Energy &amp; Society</td>
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<td>CBE 4493a/b</td>
<td>Polymer Engineering</td>
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<td>CEE 3362a/b</td>
<td>Drinking Water Quality and Treatment</td>
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<td>CBE 4484a/b</td>
<td>Green Fuels and Chemicals</td>
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<tr>
<td>MME 4429a/b</td>
<td>Nuclear Engineering</td>
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*Accelerated Masters students can take a graduate course with special permission from the Department Chair.*