

Chemical: Biochemical and Environmental Engineering (Option B)

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

| Year 2: | |
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| 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 2130f | Building Better (Communication) Bridges: Rhetoric & 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 |

Computational Methods for Engineering

Applied Statistics and Data Analysis for Engineers

Year 3:

CBE 2291b

CBE 3307a

SS 2143b

Term A

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|-----------|---|
| CBE 3315a | Reaction Engineering |
| CBE 3318a | Introduction to Chemical Process Simulation |
| CBE 3322a | Heat Transfer Operations |
| CBE 3330a | Bioreaction & Bioprocess Engineering |
| CBE 3396y | Biochemical Engineering Lab |
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Energy & Environment

Term B

| CBE 3310b | Process Dynamics and Control |
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| CBE 3316b | Sustainable Chemical Engineering & Life Cycle Analysis |
| CBE 3319b | Introduction to Plant Design and Safety |
| CBE 3323b | Staged Operations |
| CBE 3324b | Mass Transfer Operations |
| CBE 3396y | Biochemical Engineering Lab |
| CBE 4403b | Biochemical Separation Process |

Year 4:

Term A

CBE 4498 Biochemical Process and Plant Design

Two 0.5 Technical elective

Two 0.5 Non-technical elective taken from approved list

Term B

CBE 4498 Biochemical Process and Plant Design

ELI 4110g Engineering Ethics, Sustainable Development and the Law

Two 0.5 Technical elective

0.5 Non-technical elective taken from approved list

Accelerated Masters students can take a graduate course with special permission from the Department Chair.

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.

| CBE 4404a/b | Downstream Processing in Pharmaceutical |
|-------------|---|
| | Manufacturing |
| CBE 4413a/b | Selected Topics in Chemical Engineering |
| CBE 4416a/b | Carbon Footprint Management |
| CBE 4417a/b | Catalytic Processes |
| CBE 4418a/b | Industrial Multiphase Reactor Design |
| CBE 4420a/b | Computer Process Control |
| CBE 4428a/b | Introduction to Nanoengineering |
| CBE 4432a/b | Energy and Fuels Production Systems |
| CBE 4485a/b | Energy and Society |
| CBE 4493a/b | Polymer Engineering |
| Biochemi | cal and Environmental Engineering Courses |
| CBE 4405a/b | Air Pollution |
| CBE 4407a/b | Solid Waste Treatment |
| CBE 4409a/b | Wastewater Treatment |
| CBE 4411a/b | Engineering Coffee |
| CBE 4425 | Biochemical & Environmental Eng. Project |
| CBE 4421a/b | Introduction to Biomaterials Engineering |
| CBE 4422a/b | Nanobiotechnology |
| CBE 4423a/b | Tissue Engineering |
| CBE 4463a/b | Water Pollution Design |
| CEE 3362a/b | Drinking Water Quality and Treatment |
| CBE 4484a/b | Green Fuels and Chemicals |
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