

Chemical: Biochemical and Environmental Engineering (Option B)

September 2020 (students who entered first year in September 2015 or earlier)

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Year 2:		
Term A		NOTES:
AM 2270a	Applied Math for Engineering II	
CBE 2206a	Industrial Organic Chemistry I	
CBE 2214a	Engineering Thermodynamics	
CBE 2220a	Chemical Process Calculations	
CBE 2290a	Fundamentals of Biochemical and Environmental Engineering	
ES 2211F	Engineering Communications	
Term B		
AM 2277b	Applied Math Chemical and Civil Engineering III	
CBE 2207b	Industrial Organic Chemistry II	
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:		Non-technical Electives:
Term A		Please choose a maximum of 1.0 credits (one 1.0 credit course or two
CBE 3330a	Bioreaction & Bioprocess Engineering	0.5 credit courses) from the 1000 level and a minimum of one 0.5
CBE 3315a	Reaction Engineering	credit from the 2000 (or higher) level.
CBE 3318a	Introduction to Chemical Process Simulation	http://www.eng.uwo.ca/undergraduate/upper_year/electives.html
CBE 3322a	Heat Transfer Operations	inttp://www.eng.uwo.ca/undergraduate/upper_year/electives.intilli
CBE 3325a	Particulate Operations	
CBE 3396y	Biochemical Engineering Lab	
,		Technical Elective List:
Term B		
CBE 3310b	Process Dynamics and Control	Some technical electives may not be offered in a given academic
CBE 3319b	Introduction to Plant Design and Safety	year. Consult the Department for accurate listing.
CBE 3323b	Staged Operations	General Chemical Engineering Courses

CBE 3324b Mass Transfer Operations

Biochemical Engineering Lab CBE 3396v

ECE 2208b **Electrical Measurement and Instrumentation**

One 0.5 Technical elective

Year 4:

Term A

Bus 2299E **Business for Engineers**

CBE 4498 **Biochemical Process and Plant Design**

Two 0.5 Technical elective

0.5 Non-technical elective taken from approved list

Term B

Bus 2299E **Business for Engineers**

CBE 4498 **Biochemical Process and Plant Design**

Two 0.5 Technical elective

ES 4498G Engineering Ethics, Sustainable Development and the Law

Students must take a minimum of 1.0 technical elective credits from the Biochemical and Environmental Engineering Course List.

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

Ger	neral Chemical Engineering Courses	
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	
Biochemic	al and Environmental Engineering Courses	
CBE 4403a/b	Biochemical Separation Process	
CBE 4407a/b	Solid Waste Treatment	
CBE 4425	Biochemical & Environmental Eng. Project	
CBE 4421a/b	Introduction to Biomaterials Engineering	
CBE 4422a/b	Nanobiotechnology	
CBE 4423a/b	Tissue Engineering	
CBE 4424a/b	Biosensor Principles and Applications	
CBE 4463a/b	Water Pollution Design	
CEE 3362a/b	Drinking Water Quality and Treatment	
CEE 4405a/b	Air Pollution	
GPE 4484a/b	Green Fuels and Chemicals	
MME 4429a/b	Nuclear Engineering	