

# **Chemical Engineering and Business (Option C)**

September 2021 (for students who entered HBA in September 2019 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<br>Engineering |
| BUS 2257  | Accounting & Business Analysis                               |
| Term B    | Applied Mask Chamical and Civil Fusing aring III             |
| NMM 2277b | Applied Math Chemical and Civil Engineering III              |

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

Accounting & Business Analysis

### Year 3: HBA 1

BUS 2257

#### Year 4:

# 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
BUS 4569 Ivey Field Project

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
CBE 3324b Mass Transfer Operations
CBE 3395y Chemical Engineering Lab
SS 2143b Applied Statistics and Data Analysis for Engineers

## Year 5:

#### Term A

CBE 4497 Chemical Process and Plant Design One 0.5 Technical elective 1.5 HBA required courses\*\*

### Term B

CBE 4497 Chemical Process and Plant Design
ELI 4110g Engineering Ethics, Sustainable Development and the Law
One 0.5 Technical elective

1.5 Business electives chosen from 4000 level Business courses.

### **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. For HBA related questions, please contact the Richard Ivey School of Business. For Engineering related questions, please contact your Academic Counsellor in Engineering.

#### \*\*1.5 HBA required courses:

- International Perspective Requirement: Business 4505a/b
- Corporations and Society Requirement: 0.5 course from Business Administration – Corporations and Society designated electives offered during the academic year to satisfy this requirement.
- Managerial Accounting Requirement: Business 4624a/b

### **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                 |
|-------------|--|
| CBL 4404a/D | Pharmaceutical Manufacturing             |
| CBE 4405a/b | Air Pollution                            |
| CBE 4407a/b | Solid Waste Treatment                    |
| CBE 4409a/b | Wastewater Treatment                     |
| CBE 4411a/b | Engineering Coffee                       |
| CBE 4413a/b | Selected Topic in Chemical Engineering   |
| CBE 4415    | Chemical Engineering Project             |
| 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 4421a/b | Introduction to Biomaterials Engineering |
| CBE 4422a/b | Nanobiotechnology                        |
| CBE 4423a/b | Tissue Engineering                       |
| CBE 4424a/b | Biosensor Principles and Applications    |
| CBE 4428a/b | Introduction to Nanoengineering          |
| CBE 4432a/b | Energy and Fuels Production Systems      |
| CBE 4463a/b | Water Pollution Design                   |
| CBE 4485a/b | Energy & Society                         |
| CBE 4493a/b | Polymer Engineering                      |
| CEE 3362a/b | Drinking Water Quality and Treatment     |
| GPE 4484a/b | Green Fuels and Chemicals                |
| MME 4429a/b | Nuclear Engineering                      |