### COMBINED MAJOR IN CHEMICAL ENGINEERING AND BIOCHEMISTRY
#### BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

**CURRICULUM OUTLINE - Class of 2024**

*Sample Only – Actual Curriculum Sequence May Deviate from Sample*

**FALL** | **SPRING** | **SUMMER 1** | **SUMMER 2**
---|---|---|---
**Year 1**
CHEM1151 | General Chem for Engrs.| 4 | MATH1342 | Calculus 2 for Engrs.| 4 | CHME2308 | CHE Conservation Princ.| 4 | Vacation
ENGW1111 | College Writing | 4 | PHYS1151 | Physics 1 for Engrs.| 4 | MATH2321 | Calculus 3 for Engrs.| 4 | Vacation
GE1000 | Intro. to Eng’g.| 1 | PHYS1152 | Physics 1 Lab | 1 | | |
GE1501 | Cornerstone Eng’g 1 | 4 | PHYS1153 | ILS for PHYS1151 | 1 | | |
MATH1341 | Calculus 1 for Engrs.| 4 | GE1502 | Cornerstone Eng’g 2 | 4 | | |
**Year 2**
BIOL1115 | Biology for Engrs| 4 | CHEM2313 | Organic Chemistry 2| 4 | Elective | General Elective| 4 | Vacation
CHEM2311 | Organic Chemistry 1| 4 | CHEM2314 | Lab for CHEM 2313| 4 | BIOL2301 | Gen. & Molecular Bio.| 4 | Vacation
CHEM2312 | Lab for CHEM2311| 1 | CHEM2321 | Analytical Chem.| 4 | BIOL2302 | Lab for BIOL2301| 1 | Vacation
CHME2310 | Transport Processes 1| 4 | CHEM2322 | Lab for CHEM2321| 1 | | |
MATH2341 | Diff. Eq./Lin. Alg.| 4 | CHME2320 | Elective | 4 | | |
**Year 3**
CHME3312 | Transport Processes 2| 4 | ENCP 2000 | Intro to Eng’g, Co-op| 1 | BIOL3611 | Biochemistry| 4 | Co-op
CHME3315/6 | CHE Eng’g. Exp. Des 1 with recitation| 4 | CHME4315/6 | CHE Eng’g. Exp. Des 2 with recitation| 4 | BIOL3612 | Lab for BIOL2323| 1 | |
CHME3322 | CHE Thermodynamics 2| 4 | CHEM4510 | CHE Kinetics| 4 | Elective | General Elective| 4 | |
ENGW3335* | Advanced Writing| 4 | CHEM4701 | Cptsn 1: Sep. & Proc. Anlys.| 4 | | |
**Year 4**
Co-op | 4 | BIOL4707 | Cell & Molecular Biology| 4 | | |
ENCP 3000 | Prof. Issues in Eng’g.| 1 | CHEM4512 | Chem. Eng. Process Control| 4 | | |
CHME4703/5 | Capstone Design 2: Chem.| 4 | | | |
BIOXXXX | Process Design w recit| 4 | | | |

Please note this combined major has 8 1/2 semesters worth of coursework.

* ENGW3302 is an acceptable substitution for engineering majors.

**NUPATH Requirements:** Interpreting Culture (IC), Societies and Institutions (SI), Differences and Diversity (DD) and Integration Experience (EX) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements and should use General Electives to do so.

General Electives are academic, non-remedial, non-repetitive courses.

Please consult with your Academic Advisor:
Last Names A-K: Meghan Severance m.severance@northeastern.edu
Last Names L-Z: Caitlin Goldblum, c.goldblum@northeastern.edu

The registrar’s website provides a listing of degree requirements and DARS provides a degree audit utility for students.

Revised 03/12/2020 EDG