

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 CHEM1153 Recitation for CHEM1151 0 ENGW1111 College Writing 4 GE1000 Intro. to Eng'g. 1 GE1501 Cornerstone Eng'g 1 4 MATH1341 Calculus 1 for Engrs. 4 | MATH1342 Calculus 2 for Engrs. 4 PHYS1151 Physics 1 for Engrs. 3 PHYS1152 Physics 1 Lab 1 PHYS1153 ILS for PHYS1151 1 GE1502 Cornerstone Eng'g 2 4 Elective General Elective 4 | CHME2308 ChE Conservation Princ. 4 MATH2321 Calculus 3 for Engrs. 4 | Vacation |
| Year 2 AA | BIOL1115 Biology for Engrs 4 CHEM2311 Organic Chemistry 1 4 CHEM2312 Lab for CHEM2311 1 CHEM2319 Recitation for CHEM2311 0 CHME2310 Transport Processes 1 4 MATH2341 Diff. Eq./Lin. Alg. 4 | CHEM2313 Organic Chemistry 2 4 CHEM2314 Lab for CHEM 2313 1 CHEM2320 Recitation for CHEM2313 0 CHEM2331 Bioanalytical Chem. 4 CHEM2332 Lab for CHEM2331 1 CHME2000 Intro to Eng'g. Co-op 1 CHME2320 ChE Thermodynamics 1 4 Elective General Elective 4 | Elective General Elective 4 BIOL2301 Gen. & Molecular Bio. 4 BIOL2302 Lab for BIOL2301 1 | Co-op |
| Year 3 AA | Co-op | CHME3312 Transport Processes 2 4 CHME3315 ChE Eng'g. Exp. Design 1 4 CHME3322 ChE Thermodynamics 2 4 ENGW3315* Advanced Writing 4 | BIOL3611 Biochemistry 4 BIOL3612 Lab for BIOL2323 1 Elective General Elective 4 | Co-op |
| Year 4 AA | Co-op | BIOL4707 Cell & Molecular Biology 4 CHME3000 Prof. Issues in Eng'g. 1 CHME 4315 ChE Eng'g. Exp. Design 2 4 CHME4510 ChE Kinetics 4 CHME4701 Cpstn 1: Sep. & Proc. Anlys. 4 | Vacation | Co-op |
| Year 5 AA | Co-op | CHME4512 Chem. Eng. Process Control 4 CHME4703 Capstone Design 2: Chem. Process Design 4 CHEMXXXX Adv. Chem Elective 4 BIOLXXXX Adv. Biology Elective 4 | | |

Revised 4/11/2019

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.