

**COMBINED MAJOR IN CHEMICAL ENGINEERING AND BIOCHEMISTRY**  
**BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING**  
**CURRICULUM OUTLINE - Class of 2022**

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

	FALL	SPRING	SUMMER 1	SUMMER 2
Year 1	<a href="#">CHEM1151</a> General Chem for Engrs. 4 <a href="#">CHEM1153</a> Recitation for CHEM1151 0 <a href="#">ENGW1111</a> College Writing 4 <a href="#">GE1000</a> Intro. to Eng'g. 1 <a href="#">GE1501</a> Cornerstone Eng'g 1 4 <a href="#">MATH1341</a> Calculus 1 for Engrs. 4	<a href="#">MATH1342</a> Calculus 2 for Engrs. 4 <a href="#">PHYS1151</a> Physics 1 for Engrs. 3 <a href="#">PHYS1152</a> Physics 1 Lab 1 <a href="#">PHYS1153</a> ILS for PHYS1151 1 <a href="#">GE1502</a> Cornerstone Eng'g 2 4 Elective General Elective 4	<a href="#">CHME2308</a> ChE Conservation Princ. 4 <a href="#">MATH2321</a> Calculus 3 for Engrs. 4	Vacation
Year 2 AA	<a href="#">BIOL1115</a> Biology for Engrs 4 <a href="#">CHEM2311</a> Organic Chemistry 1 4 <a href="#">CHEM2312</a> Lab for CHEM2311 1 <a href="#">CHEM2319</a> Recitation for CHEM2311 0 <a href="#">CHME2310</a> Transport Processes 1 4 <a href="#">MATH2341</a> Diff. Eq./Lin. Alg. 4	<a href="#">CHEM2313</a> Organic Chemistry 2 4 <a href="#">CHEM2314</a> Lab for CHEM 2313 1 <a href="#">CHEM2320</a> Recitation for CHEM2313 0 <a href="#">CHEM2331</a> Bioanalytical Chem. 4 <a href="#">CHEM2332</a> Lab for CHEM2331 1 <a href="#">CHME2000</a> Intro to Eng'g. Co-op 1 <a href="#">CHME2320</a> ChE Thermodynamics 1 4 Elective General Elective 4	Elective General Elective 4 <a href="#">BIOL2301</a> Gen. & Molecular Bio. 4 <a href="#">BIOL2302</a> Lab for BIOL2301 1	Co-op
Year 3 AA	Co-op	<a href="#">CHME3312</a> Transport Processes 2 4 <a href="#">CHEM3315</a> ChE Eng'g. Exp. Design 1 4 <a href="#">CHME3322</a> ChE Thermodynamics 2 4 <a href="#">ENGW3315*</a> Advanced Writing 4	<a href="#">BIOL3611</a> Biochemistry 4 <a href="#">BIOL3612</a> Lab for BIOL2323 1 Elective General Elective 4	Co-op
Year 4 AA	Co-op	<a href="#">BIOL4707</a> Cell & Molecular Biology 4 <a href="#">CHME3000</a> Prof. Issues in Eng'g. 1 <a href="#">CHME 4315</a> ChE Eng'g. Exp. Design 2 4 <a href="#">CHME4510</a> ChE Kinetics 4 <a href="#">CHME4701</a> Cpstn 1: Sep. & Proc. Anlys. 4	Vacation	Co-op
Year 5 AA	Co-op	<a href="#">CHME4512</a> Chem. Eng. Process Control 4 <a href="#">CHME4703</a> Capstone Design 2: Chem. Process Design 4 CHEMXXXX Adv. Chem Elective 4 BIOLXXXX Adv. Biology Elective 4		

Revised 3/19/2018

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) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements, and if these are not fulfilled in engineering courses, should General Electives to do so. General Electives are academic, non-remedial, non-repetitive courses.

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