

**COMBINED MAJOR IN CHEMICAL ENGINEERING AND BIOCHEMISTRY**  
**BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING**  
**CURRICULUM OUTLINE - Class of 2025**

*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="#">GE1502</a>	Cornerstone Eng'g 2 4	<a href="#">CHME2308</a>	ChE Conservation Princ. #	Vacation
	<a href="#">CHEM1153</a>	Recitation for CHEM1151 0	<a href="#">MATH1342</a>	Calculus 2 for Engrs. 4	<a href="#">MATH2321</a>	Calculus 3 for Engrs. #	
	<a href="#">ENGW1111</a>	First-Year Writing 4	<a href="#">PHYS1151</a>	Physics 1 for Engrs. 3			
	<a href="#">GE1000</a>	Intro. to Eng'g. 1	<a href="#">PHYS1152</a>	Physics 1 Lab 1			
	<a href="#">GE1501</a>	Cornerstone Eng'g 1 4	<a href="#">PHYS1153</a>	ILS for PHYS1151 1			
	<a href="#">MATH1341</a>	Calculus 1 for Engrs. 4	Elective	General Elective 4			
Year 2 AA	<a href="#">BIOL1115</a>	Biology for Engrs 4	<a href="#">CHEM2313</a>	Organic Chemistry 2 4	<a href="#">BIOL2301</a>	Gen. & Molecular Bio. #	Co-op
	<a href="#">CHEM2311</a>	Organic Chemistry 1 4	<a href="#">CHEM2314</a>	Lab for CHEM 2313 1	<a href="#">BIOL2302</a>	Lab for BIOL2301 #	
	<a href="#">CHEM2312</a>	Lab for CHEM2311 1	<a href="#">CHEM2321</a>	Analytical Chem. 4	Elective	General Elective #	
	<a href="#">CHME2310</a>	Transport Processes 1 4	<a href="#">CHEM2322</a>	Lab for CHEM2321 1			
	<a href="#">MATH2341</a>	Diff. Eq./Lin. Alg. 4	<a href="#">CHEM2323</a>	Recitation for CHEM2321 0			
			<a href="#">or CHEM2331</a>	Bioanalytical Chem. 4			
			<a href="#">CHEM2332</a>	Lab for Bioanalytical Chem. 1			
			<a href="#">CHME2320</a>	ChE Thermodynamics 1 4			
			<a href="#">ENCP2000</a>	Intro to Eng'g. Co-op 1			
			Elective	General Elective 4			
Year 3 AA		Co-op	<a href="#">CHME3312</a>	Transport Processes 2 4	<a href="#">BIOL3611</a>	Biochemistry #	Co-op
			<a href="#">CHME3315</a>	ChE Eng'g. Exp. Des 1 4	<a href="#">BIOL3612</a>	Lab for BIOL 3611 #	
			<a href="#">CHME3316</a>	Recitation for CHME3315 0	Elective	General Elective #	
			<a href="#">CHME3322</a>	ChE Thermodynamics 2 4			
			<a href="#">*ENGW3302</a>	Advanced Writing 4			
Year 4 AA		Co-op	<a href="#">BIOL4707</a>	Cell & Molecular Biology 4			Co-op
			<a href="#">CHME 4315</a>	ChE Eng'g. Exp. Des 2 4			
			<a href="#">CHME4316</a>	Recitation for CHME4315 0		Vacation	
			<a href="#">CHME4510</a>	ChE Kinetics 4			
			<a href="#">CHME4701</a>	Cpstn 1: Sep. & Proc. Anlys. 4			
			<a href="#">ENCP3000</a>	Prof. Issues in Eng'g. 1			
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			
			<a href="#">CHME4705</a>	Recitation for CHME4703 0			
			BIOLXXXX	Adv. Biology Elective 4			
			CHEMXXXX	Adv. Chem Elective 4			

Revised 5/8/20

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

\* ENGW3315 is an acceptable substitution.

**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.

[Please consult with your Academic Advisor, found here.](#)

Degree requirements can be found in the academic catalog and DARS provides a degree audit for students.