

**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 First-Year Writing 4 GE1000 Intro. to Eng'g. 1 GE1501 Cornerstone Eng'g 1 4 MATH1342 Calculus 2 for Engrs. 4	GE1502 Cornerstone Eng'g 2 4 MATH2321 Calculus 3 for Engrs. 0 PHYS1151 Physics 1 for Engrs. 4 PHYS1152 Physics 1 Lab 1 PHYS1153 ILS for PHYS1151 1 Elective General Elective 4	CHME2308 ChE Conservation Princ. 4 Elective General Elective 4	Vacation
Year 2 MC	CHEM2311 Organic Chemistry 1 4 Lab for CHEM2311 1 CHME2310 Transport Processes 1 4 CHME2320 ChE Thermodynamics 1 4 MATH2341 Diff. Eq./Lin. Alg. 4	BIOL 1115 General Biology 1 for Engrs 4 or PHYS 1155 Physics for Engrs. 2, 3 PHYS 1156 Lab for PHYS1155, and 1 PHYS 1157 Interactive Learn Sem. for PHYS1155 1 CHEM2313 Organic Chem. 2 4 CHEM2314 Lab for CHEM2313 1 CHME3312 Transport Processes 2 4 CHME3322 ChE Thermodynamics 2 4 ENCP2000 Intro. to Eng'g. Co-op 1	Elective Adv. Science Elective 4 Elective General Elective 4	Co-op
Year 2 MD	BIOL 1115 General Biology 1 for Engrs 4 or PHYS 1155 Physics for Engrs. 2 3 PHYS 1156 Lab for PHYS1155, and 1 PHYS 1157 Interactive Learn Sem. for PHYS1155] 1 CHEM2311 Organic Chemistry 1 4 CHEM2312 Lab for CHEM2311 1 CHME2310 Transport Processes 1 4 ENCP2000 Intro. to Eng'g. Co-op 1 MATH2341 Diff. Eq./Lin. Alg. 4	*ENGW3302 Adv Writing in the Tech Prof (<i>to be taken online</i>) 4 Co-op	Co-op	CHEM2313 Organic Chem. 2 4 CHEM2314 Lab for CHEM2313 1 CHME2320 ChE Thermo. 1 4
Year 3 MC	*ENGW3302 Adv Writing in the Tech Prof (<i>to be taken online</i>) 4 Co-op	CHME3315 ChE Eng'g Exp. Design 1 4 CHME3316 Recitation for CHME3315 0 CHME4510 ChE Kinetics 4 CHME4701 Cpstn 1: Sep. & Proc. Anlys. 4 Elective General Elective 4	Elective General Elective 4 Elective General Elective 4	Co-op
Year 3 MD	CHME3312 Transport Processes 2 4 CHME3315 ChE Eng'g Exp. Design 1 4 CHME3316 Recitation for CHEM3315 0 CHME3322 ChE Thermodynamics 2 4 Elective General Elective 4	Co-op	Co-op	Elective General Elective 4 Elective General Elective 4
Year 4 MC	Co-op	CHME4315 ChE Eng'g Exp. Design 2 4 CHME4316 Recitation for CHME4315 0 CHME4512 ChE Process Control 4 CHME4703 Cpstn 2: Chem. Proc. Design 4 CHME4705 Recitation for CHME4703 0 ENCP3000 Prof. Issues in Eng'g. 1 Elective Advanced Eng. Elective 4		
Year 4 MD	CHME4315 ChE Eng'g Exp. Design 2 4 CHME4316 Recitation for CHME4315 0 CHME4510 ChE Kinetics 4 CHME4701 Cpstn 1: Sep. & Proc. Anlys. 4 ENCP3000 Prof. Issues in Eng'g. 1 Elective Advanced Science Elective 4	CHME4512 ChE Process Control 4 CHME4703 Cpstn 2: Chem. Proc. Design 4 CHME4705 Recitation for CHME 4703 0 Elective Adv. Eng'g. Elective 4 Elective General Elective 4		

Revised 5/8/20

Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1 - see advisor

* 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.

Advanced Science Elective Requirements: Students can choose between BIOL2301, BIOL 2327, BIOL3421/2, BIOL3603, BIOL3611/2, CHEM2321/2, CHEM2331/2, CHEM3403/4, CHEM3501/2/3, CHEM4621/2, CHEM4628/9, EEMB2302/3, EEMB3460, EEMB3470/1, PHYS1211, PHYS2303, PHYS2371/2, PHYS3601, PHYS3602. Students must meet all prerequisite requirements to enroll in these courses and enroll in co-requisite labs if applicable.

Advanced Engineering Elective Requirements: Must be 4000-5999 level engineering course; may be within BIOE, CHME, CIVE, EECE, ME, IE, MEIE, ENGR. Students must meet all course restrictions and prerequisite requirements to enroll in these courses. A faculty approved undergraduate research project can be substituted for this requirement. Research must be 4 semester hours and the Chemical Engineering Undergraduate Education Committee must approve project prior to registration. Proper registration form will be required; please see advisor for more details.

[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.