

Bachelor of Science in Chemical Engineering - 4 Year 2 Co-op Program

CURRICULUM OUTLINE - Class of 2022

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL		SPRING		SUMMER 1		SUMMER 2				
Year 1	MATH1342	Calculus 2 for Engrs.	4	MATH2321	Calculus 3 for Engrs.	4	CHME2308	ChE Conservation Princ.	4		
	CHEM1151	General Chem for Engrs.	4	PHYS1151	Physics 1 for Engrs.	3	Elective	General Elective 2	4		
	CHEM1153	Recitation for CHEM1151	0	PHYS1152	Physics 1 Lab	1					
	GE1000	Intro. to Eng'g.	1	PHYS1153	ILS for PHYS1151	1					
	GE1501	Cornerstone Eng'g 1	4	GE1502	Cornerstone Eng'g 2	4					
	ENGW1111	College Writing	4	Elective	General Elective 1	4					
Year 2 MC	MATH2341	Diff. Eq./Lin. Alg.	4	CHEM2313	Organic Chem. 2	4	Elective	General Elective 4	4		
	CHEM2311	Organic Chemistry 1	4	CHEM2314	Lab for CHEM2313	1	Elective	Adv. Science Elective	4		
	CHEM2312	Lab for CHEM2311	1	CHEM2320	Recitation CHEM2313	0					
	CHEM2319	Recitation for CHEM2311	0	CHME2320	ChE Thermodynamics 1	4					
	CHME2310	Transport Processes 1	4	CHME3312	Transport Processes 2	4					
	BIOL 1115 or	[General Biology 1 for Engrs. OR	4/5	Elective	General Elective 3	4					
	PHYS 1155	Physics for Engrs. 2,		CHME2000	Intro. to Eng'g. Co-op	1					
	PHYS 1156	Lab for PHYS1155, and									
	PHYS 1157]	Interactive Learn Sem. for PHYS1155]									
Year 2 MD	MATH2341	Diff. Eq./Lin. Alg.	4	ENGW3302	Adv Writing in the Tech Prof (to be taken online)	4					
	CHEM2311	Organic Chemistry 1	4						CHEM2313	Organic Chem. 2	4
	CHEM2312	Lab for CHEM2311	1						CHEM2314	Lab for CHEM2313	1
	CHEM2319	Recitation for CHEM2311	0						CHEM2320	Recitation CHEM2313	0
	CHME2000	Intro. to Eng'g. Co-op	1						CHME2320	ChE Thermo. 1	4
	CHME2310	Transport Processes 1	4								
	BIOL 1115 or	[General Biology 1 for Engrs. OR	4/5								
	PHYS 1155	Physics for Engrs. 2,									
	PHYS 1156	Lab for PHYS1155, and									
	PHYS 1157]	Interactive Learn Sem. for PHYS1155]									
Year 3 MC	ENGW3302	Adv Writing in the Tech Prof (to be taken online)	4	CHME3315	ChE Eng'g Exp. Design 1	4	Elective	General Elective 5	4		
				CHME3322	ChE Thermodynamics 2	4	Elective	General Elective 6	4		
		Co-op		CHME4510	ChE Kinetics	4					
				CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4					
Year 3 MD	CHME3312	Transport Processes 2	4						Elective	General Elective 4	4
	CHME3315	ChE Eng'g Exp. Design 1	4						Elective	General Elective 5	4
	CHME3322	ChE Thermodynamics 2	4								
	Elective	General Elective 3	4								
Year 4 MC				CHME3000	Prof. Issues in Eng'g.	1					
				CHME4315	ChE Eng'g Exp. Design 2	4					
				CHME4512	ChE Process Control	4					
				CHME4703	Cpstn 2: Chem. Proc. Design	4					
		Co-op		Elective	Advanced Eng. Elective	4					
Year 4 MD	CHME3000	Prof. Issues in Eng'g.	1	CHME4512	ChE Process Control	4					
	CHME4315	ChE Eng'g Exp. Design 2	4	CHME4703	Cpstn 2: Chem. Proc. Design	4					
	CHME4510	ChE Kinetics	4	Elective	Adv. Eng'g. Elective	4					
	CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4	Elective	General Elective 6	4					
	Elective	Advanced Science Elective	4								

Revised 3/19/18

You will need to have AP credit for Calc. AB (MATH1341 - Calculus 1 - 4 SH) - see advisor

* [ENGW3315](#) is an acceptable substitution for engineering majors.

NUpath Requirements through General Electives- 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 use General Electives to do so. General Electives are academic, non-remedial, non-repetitive courses.

Advanced Science Elective Requirements: Students can choose between BIOL2301, BIOL2321/22, BIOL2327, BIOL3603, BIOL 3611/12, CHEM2321/22, CHEM 2331/2332, CHEM2341/42, CHEM3403/04, CHEM 3501, CHEM4621/4622, CHEM4628/29, EEMB 2302/2303, EEMB 2610/2611, PHYS2303, PHYS3601. 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. 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.

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