

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

### CURRICULUM OUTLINE - Class of 2021

Sample Only – Actual Curriculum Sequence May Deviate from Sample

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

Revised 8/2/2017 RJW

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.

Electives may be interchanged. Please consult with your advisor in 220SN, 617-373-2154

**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 BIOL2301/02, BIOL2323/24, BIOL2327, BIOL3603, CHEM2321/22, CHEM2341/42, CHEM3403/04, 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.**