

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	MATH1341	Calculus 1 for Engrs.	4	MATH1342	Calculus 2 for Engrs.	4	Vacation	Vacation	Vacation	Vacation	Vacation		
	CHEM1151	General Chem for Engrs.	4	PHYS1151	Physics 1 for Engrs.	3							
	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 AA	CHEM2311	Organic Chemistry 1	4	CHEM2313	Organic Chem. 2	4	Vacation	Co-op	Vacation	Co-op	Co-op		
	CHEM2312	Lab for CHEM2311	1	CHEM2314	Lab for CHEM2313	1							
	CHEM2319	Recitation for CHEM2311	0	CHEM2320	Recitation for CHEM2313	0							
	CHME2308	ChE Conservation Princ.	4	CHME2000	Intro. to Eng'g. Co-op	1							
	MATH2321	Calculus 3 for Engrs.	4	CHME2310	Transport Processes 1	4							
	BIOL 1115 or	[General Biology 1 for Engrs. OR	4/5	CHME2320	ChE Thermodynamics 1	4							
	PHYS 1155	Physics for Engrs. 2,		MATH2341	Diff. Eq./Lin. Alg.	4							
PHYS 1156	Lab for PHYS1155, and												
PHYS 1157]	Interactive Learn Sem. for PHYS1155]												
Year 2 BA	CHEM2311	Organic Chemistry 1	4	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	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
	CHME2308	ChE Conservation Princ.	4										
	MATH2321	Calculus 3 for Engrs.	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 AA	Co-op	Co-op	Co-op	CHME3312	Transport Processes 2	4	Elective	General Elective 2	4	Co-op	Co-op	Co-op	
				CHME3315	Chem Eng Lab 1	4	Elective	General Elective 3	4				
				CHME3322	ChE Thermodynamics 2	4							
				ENGW3302*	Adv. Writing for Prof.	4							
Year 3 BA	CHME2310	Transport Processes 1	4	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	Elective	General Elective 3	4
	CHME3322	ChE Thermodynamics 2	4								Elective	General Elective 4	4
	MATH2341	Diff. Eq./Lin. Alg.	4										
	Elective	General Elective 2	4										
Year 4 AA	Co-op	Co-op	Co-op	CHME3000	Prof. Issues in Eng'g.	1	Elective	General Elective 5	4	Co-op	Co-op	Co-op	
				CHME4315	Chem Eng Lab 2	4	Elective	General Elective 6	4				
				CHME4510	ChE Kinetics	4							
				CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4							
Elective	General Elective 4	4											
Year 4 BA	CHME3000	Prof. Issues in Eng'g.	1	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	
	CHME3312	Transport Processes 2	4										
	CHME 3315	Chem Eng Lab 1	4										
	ENGW3302*	Adv. Writing for Prof.	4										
Elective	General Elective 5^	4											
Year 5 AA	Co-op	Co-op	Co-op	CHME4512	ChE Process Control	4	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	
				CHME4703	Cpstn 2: Chem. Proc. Design	4							
				Elective	Adv. Eng'g. Elective	4							
				Elective	Adv. Science Elective	4							
Year 5 BA	CHME 4315	Chem. Eng. Lab 2	4	CHME4512	ChE Process Control	4	Co-op	Co-op	Co-op	Co-op	Co-op	Co-op	
	CHME4510	ChE Kinetics	4	CHME4703	Cpstn 2: Chem. Proc. Design	4							
	CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4	Elective	Adv. Eng'g. Elective	4							
	Elective	Advanced Science Elective	4	Elective	General Elective 6	4							

^ Chem.Eng'g. Elective may be taken here for this POA

Revised 8/2/2017 RJW

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

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

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 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.