

COMBINED MAJOR IN CHEMICAL ENGINEERING AND PHYSICS
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	CHME2308	ChE Conservation Princ.	4	Vacation		
	CHEM1153	Recitation for CHEM1151	0	GE1502	Cornerstone Eng'g 2	4			
	ENGW1111	College Writing	4	MATH1342	Calculus 2 for Engrs.	4			
	GE1000	Intro. to Eng'g.	1	PHYS1151	Physics 1 for Engrs.	3			
	GE1501	Cornerstone Eng'g 1	4	PHYS1152	Physics 1 Lab	1			
	MATH1341	Calculus 1 for Engrs.	4	PHYS1153	ILS for PHYS1151	1			
Year 2 AA	CHEM2311	Organic Chemistry 1	4	CHEM2313	Organic Chemistry 2	4	Co-op		
	CHEM2312	Lab for CHEM2311	1	CHEM2314	Lab for CHEM2313	1			
	CHEM2319	Recitation for CHEM2311	0	CHEM2320	Recitation for CHEM2313	0			
	MATH2341	Diff. Eq./Lin. Alg.	4	CHEM2000	Intro to Eng'g. Co-op	1			
	CHME2320	ChE Thermodynamics 1	4	CHME3322	ChE Thermodynamics 2	4			
	PHYS2371	Electronics	3	PHYS2303	Modern Physics	4			
	PHYS2372	Electronics Lab	1	CHME2310	Transport Processes 1	4			
Year 3 AA	Co-op		CHME3312	Transport Processes 2	4	PHYS3600	Adv. Physics Laboratory	4	Co-op
			CHME3315	ChE Eng'g. Exp. Design 1	4	Elective	General Elective	4	
			ENGW3315*	Adv. Writing for Prof.	4				
			PHYS3601**	Classical Dynamics	4				
Year 4 AA	Co-op		CHME3000	Prof. Issues in Eng'g.	1	Vacation	Co-op		
			CHME4315	ChE Eng'g. Exp. Design 2	4				
			CHME4510	ChE Kinetics	4				
			CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4				
			PHYS3602	Electricity & Magnetism	4				
Year 5 AA	Co-op		CHME4703	Cpstn 2: Chem. Proc. Design	4				
			PHYS5115	Quantum Mechanics	4				
			PHYS5318	Adv. Phy. Lab 2	4				
			Elective	Adv. Eng. Elective	4				

Revised 4/11/19

* [ENGW3302](#) is an acceptable substitution for engineering majors.

** **PHYS 3601 Classical Dynamics** is offered fall and spring semesters of even years only. Please meet with academic advisor to discuss scheduling options for Year 4 of odd years.

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.

General Electives are academic, non-remedial, non-repetitive courses.

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:

Last Names A-K Meghan Severance m.severance@northeastern.edu

Last Names L-Z Caitlin Goldblum, c.goldblum@northeastern.edu

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