

COMBINED MAJOR IN CHEMICAL ENGINEERING AND PHYSICS
BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING
CURRICULUM OUTLINE - Class of 2025

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	First-Year 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	
	CHME2320	ChE Thermodynamics 1	4	CHME2310	Transport Processes 1	4	
	MATH2341	Diff. Eq./Lin. Alg.	4	CHME3322	ChE Thermodynamics 2	4	
	PHYS2371	Electronics	3	ENCP2000	Intro to Eng'g. Co-op	1	
	PHYS2372	Electronics Lab	1	PHYS2303	Modern Physics	4	
Year 3 AA		Co-op		CHME3312	Transport Processes 2	4	Co-op
				CHME3315	ChE Eng'g. Exp. Design 1	4	
				CHME3316	Recitation for CHME3315	0	
				*ENGW3302	Adv. Writing for Prof.	4	
				**PHYS3601	Classical Dynamics	4	
Year 4 AA		Co-op		CHME4315	ChE Eng'g. Exp. Design 2	4	Co-op
				CHME4316	Recitation for CHME4315	0	
				CHME4510	ChE Kinetics	4	
				CHME4701	Cpstrn 1: Sep. & Proc. Anlys.	4	
				ENCP3000	Prof. Issues in Eng'g.	1	
				PHYS3602	Electricity & Magnetism	4	
Year 5 AA		Co-op		CHME4703	Cpstrn 2: Chem. Proc. Design	4	
				CHME4703	Recitation for CHME4703	0	
				PHYS4115	Quantum Mechanics	4	
				PHYS5318	Principles of Exp. Physics	4	
				Elective	Adv. Eng. Elective	4	

Revised 5/8/20

* ENGW3315 is an acceptable substitution.

** 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.

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.