

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	MATH2321	Calculus 3 for Engrs.	4	Vacation		
	CHEM1153	Recitation for CHEM1151	0	GE1502	Cornerstone Eng'g 2	4	PHYS1155	Physics 2 for Engrs.	3			
	ENGW1111	College Writing	4	MATH1342	Calculus 2 for Engrs.	4	PHYS1156	Physics 2 Lab	1			
	GE1000	Intro. to Eng'g.	1	PHYS1151	Physics 1 for Engrs.	3	PHYS1157	ILS for PHYS1155	1			
	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	Elective General Elective (<i>online course or adv. placement</i>)	4		Co-op		
	CHEM2312	Lab for CHEM2311	1	CHEM2314	Lab for CHEM2313	1						
	MATH2341	Diff. Eq./Lin. Alg.	4	ENCP2000	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	Elective General Elective	4		Co-op		
				CHME3315	Chem Eng Exp Design 1	4						
				CHME3316	Recitation for CHME 3315	0						
				ENGW3315*	Adv. Writing for Prof.	4						
				PHYS3601**	Classical Dynamics	4						
Year 4 AA	Co-op			ENCP3000	Prof. Issues in Eng'g.	1	Vacation			Co-op		
				CHME4315	Chem Eng Exp Design 2	4						
				CHME4316	Recitation for CHME 4315	0						
				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						
				CHME4705	Recitation for CHME 4703	0						
				PHYS5115	Quantum Mechanics	4						
				PHYS5318	Adv. Phy. Lab 2	4						
				Elective	Adv. Eng. Elective	4						

Revised 11/14/19

* [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, found here.](#)

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