COMBINED MAJOR IN CHEMICAL ENGINEERING AND PHYSICS

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

CURRICULUM OUTLINE - Class of 2023

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 (online course or adv. placement)	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	CHME2000	Intro to Eng'g. Co-op	1				
	CHME2320	ChE Thermodynamics 1	4	CHME3322	ChE Thermodynamics 2	4		Vacation		
	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 3/19/18

* 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) 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 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. A faculty approved undergraduate research project can be substituted for this requirement. Research must be 4 Semester Hours and the Chemical Engineering Undergraduate Education Commitee 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.