

CHEMICAL ENGINEERING General MAJ ORG SEQ

	UI Course #	University of Iowa Course Title	SH		ICCC Course #	Iowa Central CC Course Title	SH
Semester 1							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	BOTH	MAT 210	Calculus I	4
					MAT 216	Calculus II	4
	ENGR:1100	Introduction to Engineering Problem Solving	3		No equivalent course offered		
	CHEM:1110	Principles of Chemistry I & Lab	4		CHM 165	General Chemistry I	4
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4	ALL	ENG 105	Composition I	3
					ENG 106	Composition II	3
SPC 112					Public Speaking	3	
ENGR:1000	Engr Success for First-Year Students	1*		No equivalent course offered			
	Total		16				
Semester 2							
Spring	MATH:1560	Engineering Math II: Multi-Variable Calculus	4		MAT 219**	Calculus III	4
	MATH:2550	Engineering Math III: Matrix Algebra	2		No equivalent course offered		
	ENGR:1300	Introduction to Engineering Computing	3	CHOOSE 1	CIS 172	Java	4
					CIS 162	C++	4
	PHYS:1611	Introductory Physics I	4		PHY 212	Classical Physics I	5
	CHEM:1120	Principles of Chemistry II	4		CHM 175	General Chemistry II	4
	CBE:1000	CBE Departmental Seminar	1		No equivalent course offered		
	Total		18				
Semester 3							
Fall	MATH2560	Engineering Math IV: Differential Equations	3		MAT 226	Differential Equations with Laplace	3
		General Education Component #1	3				
	ENGR:2110	Engineering Fundamentals I – Statics	2		No equivalent course offered		
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3		No equivalent course offered		
	CHEM:2230	Organic Chemistry I For Majors	3		CHM 261	Organic Chemistry I	4
	CBE:2105	Process Calculations	3		No equivalent course offered		
	Total		17				
Semester 4							
Spring	CBE:3105	ChE Thermodynamics	3		No equivalent course offered		
	CBE:3109	Fluid Flow	2		No equivalent course offered		
	CHEM:2240	Organic Chemistry II for Majors	3		CHM 271	Organic Chemistry II	4
	CHEM:2420	Organic Chemistry Lab for Majors	3		Satisfied with CHM 261 & CHM 271 (short 1 s.h.)		
	STAT:2020	Elective #1: Prob & Stats for Engr & Phys Sci	3		No equivalent course offered		
	CBE:3000	CBE Professional Seminar	1		No equivalent course offered		
		General Education Component #2	3				
	Total		18				

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Semester 5							
Fall	CBE:3113	Heat & Mass Transfer	3			No equivalent course offered	
	CBE:3125	Chemical Process Safety	3			No equivalent course offered	
	CBE:3117	Separations	3			No equivalent course offered	
	ENGR:2720	Material Science	3			No equivalent course offered	
	ENR:2120	Engineering Fundamentals II: Electrical Circuits	3			No equivalent course offered	
	CBE:3000	CBE Professional Seminar	1			No equivalent course offered	
		Total		16			
Semester 6							
Spring	CBE:3120	Chemical Reaction Engineering	3			No equivalent course offered	
	CBE:3155	Chemical Reaction Engineering/Separation Lab	3			No equivalent course offered	
	CBE:5205	Introduction to Biochemical Engineering	3			No equivalent course offered	
		Elective #2: Engineering Elective	3			No equivalent course offered	
		General Education Component #3	3				
	CBE:3000	CBE Professional Seminar	1			No equivalent course offered	
		Total		16			
Semester 7							
Fall	CBE:4105	Process Dynamics & Control	3			No equivalent course offered	
	CBE:4109	Chemical Engineering Process Design I	2			No equivalent course offered	
	CBE:3150	Thermodynamics/Transport Laboratory	3			No equivalent course offered	
		Advanced Chemistry Elective	3				
		Elective #3: Additional Elective	3				
		Elective #4: Additional Elective	3				
	CBE:3000	CBE :Professional Seminar	1			No equivalent course offered	
	Total		18				
Semester 8							
Spring	CBE:4110	Chemical Engineering Process Design II	3			No equivalent course offered	
		Advanced Science Elective	3			No equivalent course offered	
		Elective #5: Additional Elective	3				
		General Education Component #4	3				
		General Education Component #5	3				
	CBE:4195	Senior Enriching Activities Seminar	0			No equivalent course offered	
		Total		15			

2017-2021 Curriculum

updated June 2018

* 1sh; does not count toward 128 sh total required for graduation

**Students must have completed Calculus I, II, and III to receive credit for Engineering Math II