

Chemical Engineering

	UI Course #	University of Iowa Course Title	SH		KCC Course #	Kirkwood Course Title	SH	
Semester 1								
Fall	Math 1550	Engineering Math I: Single Variable Calculus	4	BOTH	MAT 210 MAT 216	Calculus I Calculus II	4 4	
	ENGR:1100	Engineering Problem Solving I	3		EGR 160	Engineering I	3	
	CHEM:1110	Principles of Chemistry I	4		CHM 165	General Chemistry I	4	
	RHET:1030	Rhetoric (Choose one in each section: Writing Component 1, Writing Component 2, Speech Component)	4	CHOOSE 1		ENG 105	Composition I (Writing Component I)	3
						ENG 106	Composition II (Writing Component II)	3
						ENG 108	Composition II: Tech (Writing Component II)	3
						ENG 120	College Writing (Writing Component II)	5
				CHOOSE 1	SPC 101 SPC 112	Fund. of Oral Comm. (Speech Component) Public Speaking (Speech Component)	3 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	
	ENGR:1300	Engineering Problem Solving II	3	CHOOSE 1		CIS 171	Java Programming I	3
						CIS 175	Java Programming II	3
						EGR 167	Engineering II	4
						CSC 142	Computer Science	4
	PHYS:1611	Introductory Physics I	4		PHY 212	Classical Physics I	5	
	MATH:2550	Engineering Math III: Matrix Algebra	2		MAT 149	Linear Algebra	3	
	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	MATH:2560	Engineering Math IV: Diff. Equations	3		MAT 227	Differential Equations/LaPlace	4	
		General Education Component course	3					
	ENGR:2110	Engineering Fundamentals I: Statics	2		EGR 180	Statics	3	
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3		EGR 290	Thermodynamics	3	
	CHEM:2230	Organic Chemistry I For Majors	3		CHM 262	Organic Chemistry I	4.5	
	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	Organics Chemistry II for Majors	3	CHM 272	Organic Chemistry II	4.5
	CHEM:2420	Organic Chemistry Lab for Majors	3	Satisfied by CHM 262 & CHM 272		
	STAT:2020	Statistic Elective: Prob & Stats for Engr & Phys Sci	3	No equivalent course offered		
	CBE:3000	CBE Professional Seminar	1	No equivalent course offered		
		General Education Component course	3			
	Total	18				
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			
	ENGR:2720	Material Science	3	EGR 170	Material Science	3
	ENR:2120	Engineering Fundamentals II: Electrical Circuits	3	EGR 285	Introduction to Electrical Science	4
	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	Intro to Biochemical Engineering	3			
		Elective focus area course	3	No equivalent course offered		
		General Education Component course	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:3105	Thermodynamics/Transport Laboratory	3	No equivalent course offered		
		Advanced Chemistry Elective	3	No equivalent course offered		
		Elective focus area course	3			
		Elective focus area course	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 focus area course	3			
		General Education Component course	3			
		General Education Component course	3			
	CBE:4195	Senior Enriching Activities Seminar	0	No equivalent course offered		
		Total	15			

2017-2021 Curriculum

updated May 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