University of Iowa - College of Engineering &
Des Moines Area Community College

THE UNIVERSITY OF IOWA
College of Engineering

Chemical Engineering

	UI Course #	University of Iowa Course Title	SH		DMACC Course #	DMACC Course Title	SH
Semester 1							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	**BOTH**	MAT 211	Calculus I	5
					MAT 217	Calculus II	5
	ENGR:1100	Introduction to Engineering Problem Solving	3		EGR 166	Engineering Graphics/Conceptual Design	4
	CHEM:1110	Principles of Chemistry I & Lab	4		CHM 165	General/Inorganic Chemistry I	4
	RHET:1030	Rhetoric (Writing Component 1, Writing Component 2, and a single Speech Component all required)	4		ENG 105	Composition I	3
				CHOOSE 1	ENG 106	Composition II	3
					ENG 108	Composition II: Technical Writing	3
					SPC 101	Fundamentals of Oral Communication	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		MAT 148	Linear Algebra w/ Applications	4
	ENGR:1300	Introduction to Engineering Computing	3	**CHOOSE 1**	CIS 161	C++	3
					CIS 169	C#	3
					CIS 171	Java	3
				OR BOTH	CIS 125	Intro to Programming Logic	3
					EGR 155	Engineering C/C++	2
	PHYS:1611	Introductory Physics I	4		PHY 213	Classical Physics I	6
	CHEM:1120	Principles of Chemistry II	4		CHM 175	General/Inorganic Chemistry II	4
	CBE:1000	CBE Departmental Seminar	1		No equivalent course offered		
		Total	**18**				
Semester 3							
Fall	MATH:2560	Engineering Math IV: Differential Equations	3		MAT 227	Differential Equations with Laplace	4
		General Education Component #1	3				
	ENGR:2110	Engineering Fundamentals I:Statics	2		EGR 180	Statics	3
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3		No equivalent course offered		
	CHEM:2230	Organic Chemistry I For Majors	3		CHM 263	Organic Chemistry I	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	Organic Chemistry II for Majors	3		CHM 273	Organic Chemistry II	5
	CHEM:2420	Organic Chemistry Lab for Majors	3		Satisfied by CHM 263 & CHM 273		
	STAT:2020	Prob & Stats for Engr & Phys Sci (Statistics Elective)	3		No equivalent course offered		
	CBE:3000	Professional Seminar: Chemical Engineering	1		No equivalent course offered		
		General Education Component #2	3				
		Total	**18**				

Semester 5					
Fall	CBE:3113	Heat and 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		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	**15**		
Semester 6					
Spring	CBE:3120	Chemical Reaction Engineering	3		No equivalent course offered
	CBE:3155	Chemical Reaction Engineering/Separation Lab	2		No equivalent course offered
	CBE:5205	Introduction to Biochemical Engineering	3		No equivalent course offered
		Elective Focus Area course	3		
		General Education Component #3	3		
	CBE:3000	CBE Professional Seminar	1		No equivalent course offered
		Total	**15**		
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		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	**17**		
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 #4	3		
		General Education Component #5	3		
	CBE:4195	Senior Enriching Activities Seminar	0		No equivalent course offered
		Total	**15**		

2016-2018 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