

Computer Science and 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: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
					EGR 155		Engineering C/C++	2
	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	CHOOSE 1	ENG 105	Composition I	3
						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	
	CS:1210	Computer Science I: Fundamentals	4		No equivalent course offered			
	PHYS:1611		Introductory Physics I	4		PHY 213	Classical Physics I	6
		Total		17				
Semester 3								
Fall	MATH:2560	Engineering Math IV: Differential Equations	3		MAT 227	Differential Equations with Laplace	4	
	PHYS:1612	Introductory Physics II	4		PHY 223	Classical Physics II	6	
	ENGR:2110	Engineering Fundamentals I: Statics	2		EGR 180	Statics	3	
	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3		No equivalent course offered			
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3		No equivalent course offered			
		Total		15				
Semester 4								
Spring	CS:2210	Discrete Structures	3		No equivalent course offered			
	ECE:2400	Linear Systems I	3		No equivalent course offered			
	ECE:2410	Principles of Electronic Instrumentation	4		No equivalent course offered			
	ENGR:2730	Computers in Engineering	3		No equivalent course offered			
		General Education Component #2	3					
		Total		16				

Semester 5					
Fall	STAT:2020	Probability and Stat for Engineering & Phys Sci	3		No equivalent course offered
	ECE:3320	Intro to Digital Design	3		No equivalent course offered
	CS:2230	Computer Science II, Data Structures	4		No equivalent course offered
	ECE:3330	Introduction to Software Design	3		No equivalent course offered
		General Education Component #3	3		
	ECE:3000	Professional Seminar	1		No equivalent course offered
		Total	17		
Semester 6					
Spring	CS:3330	Algorithms	3		No equivalent course offered
	ECE:3350	Computer Architecture and Organization	3		No equivalent course offered
	ECE:3360	Embedded Systems and System Software	3		No equivalent course offered
		Elective Focus Area #1	3		
		General Education Component #4	3		
	CS:3820	Programming Language Concepts	3		No equivalent course offered
		Total	18		
Semester 7					
Fall	ECE:4880	Principles of CSE Design	3		No equivalent course offered
		Elective Focus Area #2 (technical, CS)	3		No equivalent course offered
		Elective Focus Area #3 (technical, ECE)	3		No equivalent course offered
	ECE:3540	Communication Networks	3		No equivalent course offered
	CS:3620	Operating System	3		
		Total	15		
Semester 8					
OR	ECE:4890	Senior CSE Design	3		No equivalent course offered
	CS:4330	Theory of Computation (Theory Elective)	3		No equivalent course offered
Spring	CS:4350	Logic in Computer Science (Theory Elective)	3		No equivalent course offered
		Elective Focus Area #4 (advanced CS)	3		No equivalent course offered
		Elective Focus Area #5 (advanced ECE)	3		No equivalent course offered
		General Education Component #5	3		
		Total	15		

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

updated May 2018

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