

Computer Science and Engineering

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	UI Course #	University of Iowa Course Title	SH		EICC Course #	Eastern Iowa CC District 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:1300	Introduction to Engineering Computing	3	CHOOSE 1	CIS 171	Java	3
					CIS 172	Java	4
					CIS 161	C++	3
	CHEM:1110	Principles of Chemistry I & Lab	4	CHOOSE 1	CHM 165	General Chemistry I	4
					CHM 166	General Chemistry I	5
	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 107	Composition I:Technical Writing	3
				CHOOSE 1	ENG 106	Composition II	3
			ENG 108		Composition II:Technical Writing	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		
	CS:1210	Computer Science I: Fundamentals	4		No equivalent course offered		
	PHYS:1611	Introductory Physics I	4		PHY 212	Classical Physics I	5
		General Education Component #1	3				
		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 222	Classical Physics II	5
	ENGR:2110	Engineering Fundamentals I: Statics	2		EGR 180	Statics	3
	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3		EGR 285	Introduction to Electrical Science	3
	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3		EGR 290	Thermodynamics	3
		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			

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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							
	ECE:4890	Senior CSE Design	3			No equivalent course offered	
CHOOSE 1	CS:4330	Theory of Computation (Theory Elective)	3			No equivalent course offered	
	CS:4350	Logic in Computer Science (Theory Elective)	3			No equivalent course offered	
Spring		Elective Focus Area #5 (advanced CS)	3			No equivalent course offered	
		Elective Focus Area #6 (advanced ECE)	3			No equivalent course offered	
		General Education Component #5	3				
		Total		15			

2017-18 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