University of Iowa - College of Engineering &
Eastern Iowa Community College

THE UNIVERSITY OF IOWA
College of Engineering

Electrical Engineering – Computer Track

	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:1100	Introduction to Engineering Problem Solving	3		EGR 160	Engineering I	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		
	ENGR:1300	Introduction to Engineering Computing	3	**CHOOSE 1**	CIS 171	Java	3
					CIS 172	Java	4
					CIS 161	C++	3
	PHYS:1611	Introductory Physics I	4		PHY 212	Classical Physics I	5
		General Education Component #1	3				
		Total	**16**				
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	MATH:3550	Engineering Math V: Vector Calculus	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**				

Electrical Engineering – Computer Track

	UI Course #	University of Iowa Course Title	SH		EICC Course #	Eastern Iowa CC District Course Title	SH
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:2210	Discrete Structures	3		No equivalent course offered		
	ECE:3330	Introduction to Software Design	3		No equivalent course offered		
	ECE:3700	Electromagnetic Theory	3		No equivalent course offered		
	ECE:3000	Professional Seminar: Electrical Engineering	1		No equivalent course offered		
		Total	**16**				
Semester 6							
Spring	CS:2230	Computer Science II (EFA #1)	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 #2	3				
		Elective Focus Area #3	3				
		General Education Component #3	3				
		Total	**18**				
Semester 7							
Fall	ECE:4880	Principles of Electrical Engineering Design	3		No equivalent course offered		
	CS:3330	Algorithms	3		No equivalent course offered		
		Elective Focus Area #4	3				
		Elective Focus Area #5	3				
		Track Breadth Elective	3		No equivalent course offered		
		General Education Component #4	3				
		Total	**18**				
Semester 8							
Spring	ECE:4890	Senior Electrical Engineering Design	3		No equivalent course offered		
		Track Depth Elective	3		No equivalent course offered		
		Elective Focus Area #6	3				
		Elective Focus Area #7	3				
		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