

**Electrical Engineering – Electrical Track**

	UI Course #	University of Iowa Course Title	SH		EICC Course #	Eastern Iowa CC District Course Title	SH
<b>Semester 1</b>							
Fall	MATH:1550	Engineering Math I – Single Variable Calculus	4	<b>BOTH</b>	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	<b>CHOOSE 1</b>	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	<b>CHOOSE 1</b>	ENG 105	Composition I	3
					ENG 107	Composition I:Technical Writing	3
				<b>CHOOSE 1</b>	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			
	<b>Total</b>		<b>16</b>				
<b>Semester 2</b>							
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	<b>CHOOSE 1</b>	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					
	<b>Total</b>		<b>16</b>				
<b>Semester 3</b>							
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
	<b>Total</b>		<b>15</b>				
<b>Semester 4</b>							
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				
	<b>Total</b>		<b>16</b>				

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	UI Course #	University of Iowa Course Title	SH		EICC Course #	Eastern Iowa CC District Course Title	SH
<b>Semester 5</b>							
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	
	ECE:3400	Linear Systems II	3			No equivalent course offered	
	ECE:3410	Electronic Circuits	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	
		<b>Total</b>		<b>16</b>			
<b>Semester 6</b>							
Spring	ECE:3500	Communication Systems	3			No equivalent course offered	
	ECE:3600	Control Systems	3			No equivalent course offered	
	ECE:3720	EE Materials and Devices	3			No equivalent course offered	
		Elective Focus Area #1	3				
		Elective Focus Area #2	3				
		General Education Component #3	3				
		<b>Total</b>		<b>18</b>			
<b>Semester 7</b>							
Fall	ECE:4880	Principles of Electrical Engineering Design	3			No equivalent course offered	
		Elective Focus Area #3	3				
		Elective Focus Area #4	3				
		Track Breadth Elective	3			No equivalent course offered	
		General Education Component #4	3				
		<b>Total</b>		<b>15</b>			
<b>Semester 8</b>							
Spring	ECE:4890	Senior Electrical Engineering Design	3			No equivalent course offered	
		Track Depth Elective	3			No equivalent course offered	
		Elective Focus Area #5	3				
		Elective Focus Area #6	3				
		General Education Component #5	3				
		<b>Total</b>		<b>15</b>			

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