3 ECE Program Information

The following tables detail a typical sequence for the core and elective courses requirements for the electrical engineering and computer engineering options:

3.1 Electrical Engineering Curriculum: (Class of 2023+)

01:160:171 III E E E E E E E E	Seneral Chemistry for Engineers Introduction to Experimentation Expository Writing Engineering Orientation Calculus I Math/Physics Analytical Physics IA Hum/Soc elective Principles of Elec. Eng. I		3 1 3 1 4 2 3 17	14:440:127 14:440:221 01:640:152 01:750:124 _::: Total Credits	Intro to Computers for Engineers Engineering Mechanics Calculus II Analytical Physics IB Hum/Soc elective		3 3 4 2 3
01:160:171 III E E E E E E E E	ntroduction to experimentation expository Writing engineering Orientation Calculus I Math/Physics Analytical Physics IA Hum/Soc elective		3 1 4 2 3	01:640:152 01:750:124 _::_	Engineering Mechanics Calculus II Analytical Physics IB		4 2
01:355:101 E 14:440:100 E 01:640:151 C 01:750:123 A ::::: H Total Credits Sophomore Ye 14:332:221 P 14:332:223 P 14:332:231 C 14:332:233 C	Expository Writing Engineering Orientation Calculus I Math/Physics Analytical Physics IA Hum/Soc elective Principles of Elec. Eng. I		1 4 2 3	01:750:124	Calculus II Analytical Physics IB		2
14:440:100 E 01:640:151 C 01:750:123 A ::::::::::::::::::::::::::::::::::::	Engineering Orientation Calculus I Math/Physics Analytical Physics IA Hum/Soc elective Principles of Elec. Eng. I		1 4 2 3	01:750:124	Analytical Physics IB		2
01:640:151 C 01:750:123 A :	Calculus I Math/Physics Analytical Physics IA Hum/Soc elective Principles of Elec. Eng. I		4 2 3	_:_:_			
01:750:123 A ::::::::::::::::::::::::::::::::::::	Analytical Physics IA Hum/Soc elective ar Principles of Elec. Eng. I		2		Hum/Soc elective		:
: : F Total Credits Sophomore Ye 14:332:221 P 14:332:223 P 14:332:231 C 14:332:233 C	lum/Soc elective ar Principles of Elec. Eng. I		3	Total Credits			
Total Credits Sophomore Ye 14:332:221 P 14:332:223 P 14:332:231 C 14:332:233 C	ar Principles of Elec. Eng. I			Total Credits			
Sophomore Ye 14:332:221 P 14:332:223 P 14:332:231 C 14:332:233 C	Principles of Elec. Eng. I		17	Total Credits			
14:332:221 P 14:332:223 P 14:332:231 C 14:332:233 C	Principles of Elec. Eng. I			<u>Total Credits</u>			1
14:332:223 P 14:332:231 D 14:332:233 D							
14:332:231 D	Principles of FFIIah	М	3	14:332:222	Principles of Elec. Eng. II	М	
14:332:233 D	incipies of LL I Lab	М	1	14:332:224	Principles of EE II Lab	М	
14:332:233 D	Digital Logic Design	М	3	14:332:226	Probability & Random Proc.	М	
	Digital Logic Design Lab	М	1	14:332:252	Programming Method. I	М	
01:640:251 N	Multivariable Calculus		4	01:640:244	Differential Equations		
01:750:227 A	Analytical Physics IIA		3				
01:750:229 A	Analytical Physics II Lab		1				
Total Credits	· .		16	Total Credits	<u>.</u>		1
Junior Year							
	Computer Arch.	М	3	14:332:312	Discrete Mathematics*	М	
	Computer Arch. Lab	М	1	14:332:346	Digital Signal Processing	М	
	inear Systems & Signals	М	3	14:332:348	Digital Signal Proc. Lab	М	
14:332:361 E	Electronic Devices	М	3	14:332:393	Professionalism/Ethics	М	
14:332:363 E	Electronic Devices Lab	М	1	14:332:366	Digital Electronics	М	
:: H	lum/Soc elective (200+)		3	14:332:368	Digital Electronics Lab	М	
14:332: R	Restricted Electrical elective	М	3	14:540:343	Engineering Econ	М	;
Total Credits			17	Total Credits	Total Credits		1
Senior Year							
	ntro to Capstone Design	М	1	14:332:448	Capstone Design in ECE	М	
	Electrical elective	M	3	14:332:	Electrical elective	M	
	Electrical elective	M	3	: :	Technical elective	M	
	echnical elective	M	3	: :	General elective		
	lum/Soc elective (200+)		3				
	Science Math Eng elective	М	3				
Total Credits	2 2 2 0.000110		16		Total Credits		1

3.2 Computer Engineering Curriculum: (Class of 2023+)

01:160:171 Int Exp 01:355:101 Exp 14:440:100 Eng 01:640:151 Cal 01:750:123 And	eneral Chemistry for agineers stroduction to perimentation pository Writing agineering Orientation alculus I Math/Physics nalytical Physics IA am/Soc elective r inciples of Elec. Eng. I inciples of EE I Lab agital Logic Design gital Logic Design Lab allytical Physics IIA nalytical Physics II Lab	M M M	3 1 3 1 4 2 3 17 3 1 4 3 1 4 3 1 1 6	14:440:127 14:440:221 01:640:152 01:750:124 _:: Total Credits 14:332:222 14:332:224 14:332:226 14:332:252 01:640:244 Total Credits	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M M M	1 1 3 4 4
Exp 01:355:101 Exp 14:440:100 Eng 01:640:151 Cal 01:750:123 An: Hu Total Credits Sophomore Year 14:332:221 Print Print	perimentation pository Writing gineering Orientation cloulus I Math/Physics nalytical Physics IA um/Soc elective r inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	3 1 4 2 3 17 3 1 3 1 4 3 1	01:640:152 01:750:124 ::: Total Credits 14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	1
14:440:100 Eng 01:640:151 Cal 01:750:123 An:	gineering Orientation Ilculus I Math/Physics Inalytical Physics IA Ilcum/Soc elective r Inciples of Elec. Eng. I Inciples of EE I Lab Inciples of EE I Lab Inciples Design In	M M	1 4 2 3 17 3 1 4 3 1	01:750:124 :: Total Credits 14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Analytical Physics IB Hum/Soc elective Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	1 1 3 2
01:640:151 Cal 01:750:123 An ::::::::::::::::::::::::::::::::::::	r inciples of Elec. Eng. I inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	3 17 3 1 4 3 1	14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	11
01:750:123 And:: Hu Total Credits Sophomore Year 14:332:221 Print 14:332:221 Dig 14:332:231 Dig 14:332:231 Dig 01:640:251 Mu 01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Con 14:332:333 Con	ralytical Physics IA um/Soc elective r inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	2 3 17 3 1 3 1 4 3 1	14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	1
E Hu Total Credits Sophomore Year 14:332:221 Prii 14:332:223 Prii 14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 Ani 01:750:229 Ani Total Credits Junior Year 14:332:331 Coi 14:332:333 Coi	r inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	3 17 3 1 3 1 4 3 1	14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	
E Hu Total Credits Sophomore Year 14:332:221 Prii 14:332:223 Prii 14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 Ani 01:750:229 Ani Total Credits Junior Year 14:332:331 Coi 14:332:333 Coi	r inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	3 1 3 1 4 3 1	14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	
Total Credits Sophomore Year 14:332:221 Prii 14:332:223 Prii 14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Cod 14:332:333 Cod	inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	3 1 3 1 4 3	14:332:222 14:332:224 14:332:226 14:332:252 01:640:244	Principles of Elec. Eng. II Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	
14:332:221 Prii 14:332:223 Prii 14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Cod 14:332:333 Cod	inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	1 3 1 4 3 1	14:332:224 14:332:226 14:332:252 01:640:244	Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	
14:332:221 Prii 14:332:223 Prii 14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Cod 14:332:333 Cod	inciples of Elec. Eng. I inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	M M	1 3 1 4 3 1	14:332:224 14:332:226 14:332:252 01:640:244	Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	M	
14:332:223 Pril 14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Cod 14:332:333 Cod	inciples of EE I Lab gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	М	3 1 4 3 1	14:332:226 14:332:252 01:640:244	Principles of EE II Lab Probability & Random Proc. Programming Method. I Differential Equations	М	
14:332:231 Dig 14:332:233 Dig 01:640:251 Mu 01:750:227 An: 01:750:229 An: Total Credits Junior Year 14:332:331 Cor 14:332:333 Cor	gital Logic Design gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	_	3 1 4 3 1	14:332:226 14:332:252 01:640:244	Probability & Random Proc. Programming Method. I Differential Equations		
14:332:233 Dig 01:640:251 Mu 01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Con 14:332:333 Con	gital Logic Design Lab ultivariable Calculus nalytical Physics IIA	_	4 3 1	14:332:252 01:640:244	Programming Method. I Differential Equations	M	
01:640:251 Mu 01:750:227 Ana 01:750:229 Ana Total Credits Junior Year 14:332:331 Con 14:332:333 Con	ultivariable Calculus nalytical Physics IIA		3		Differential Equations		
01:750:227 And 01:750:229 And Total Credits Junior Year 14:332:331 Con 14:332:333 Con 14:332:332 Con 14:332:33	<u> </u>		1				
01:750:229 And Total Credits Junior Year 14:332:331 Contained to 14:332:333 Contained to 14:332:332 C	<u> </u>			Total Credits			
Junior Year 14:332:331 Col 14:332:333 Col	,		16	Total Credits			
14:332:331 Cor 14:332:333 Cor		<u> Total Credits</u>		Total Credits			1
14:332:331 Cor 14:332:333 Cor							
14:332:333 Co	mputer Arch.	М	3	14:332:312	Discrete Mathematics*	М	
	omputer Arch. Lab	М	1	14:332:452	Software Engineering	М	
14:332:345 Lin	near Systems & Signals	М	3	14:332:434	Intro to Comp. Systems	М	
	ogramming Method. II	М	3	14:332:393	Professionalism/Ethics	М	
	estricted Comp. elective	М	3	14:540:343	Engineering Econ	М	
	um/Soc elective (200+)	М	3	_::	Technical elective	М	
Total Credits			16	Total Credits	Total Credits		1
Senior Year							
	gital System Design	М	3	14:332:448	Capstone Design in ECE	М	
	tro to Capstone Design	М	1	: :	Computer elective	M	
	mputer elective	M	3	: :	Technical elective	M	
	mputer elective	М	3	: :	General elective		
	um/Soc elective (200+)		3				
	cience Math Eng elective	М	3				
Total Credits			16	<u>Total Credits</u>			1

^{*} Note that 14:332:312 Discrete Mathematics is listed in the Spring semester of a student's Junior year. This is where Discrete Mathematics has historically been placed in the sequence. However, recent changes to the pre-requisites for Discrete Mathematics allow students to take this class as early as the Fall of their Sophomore year.