

# ELEN-Electrical Engineering Degree Plan

Total credits required: 128  
 Catalog Edition: 138  
 Students entering 2015-16

Name: \_\_\_\_\_ UIN: \_\_\_\_\_

FRESHMAN		16 credits	Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>ENGR 111 - Foundations of Engr I</b> <i>Calculus ready</i>	2	1-3
<input type="checkbox"/>	<input type="checkbox"/>	<b>MATH 151 - Engineering Math I</b> <i>Calculus ready</i>	4	3-2
<input type="checkbox"/>	<input type="checkbox"/>	<b>PHYS 218 - Mechanics</b> <i>Calculus ready</i>	4	3-3
<input type="checkbox"/>	<input type="checkbox"/>	<b>ENGL 104 - Composition and Rhetoric</b> <i>No prerequisites</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	University Core Curriculum <sup>A</sup> <i>See university approved list</i>	3	3-0

		17 credits	Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>CHEM 107 - Chemistry for Engineers</b> <i>CHEM117c</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	<b>CHEM 117 - Chem for Engineers lab</b> <i>CHEM107c</i>	1	0-3
<input type="checkbox"/>	<input type="checkbox"/>	<b>ENGR 112 - Foundations of Engr II</b> <i>ENGR111</i>	2	1-3
<input type="checkbox"/>	<input type="checkbox"/>	<b>MATH 152 - Engineering Math II</b> <i>MATH151</i>	4	3-2
<input type="checkbox"/>	<input type="checkbox"/>	<b>PHYS 208 - Electricity &amp; Optics</b> <i>PHYS218</i>	4	3-3
<input type="checkbox"/>	<input type="checkbox"/>	University Core Curriculum <sup>A</sup> <i>See university approved list</i>	3	3-0

SOPHOMORE		17 credits	Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>CSCE 121 - Intro Prog, Design, Concepts</b> <i>ENGR112</i>	4	3-2
<input type="checkbox"/>	<input type="checkbox"/>	<b>MATH 251 - Engineering Math III</b> <i>MATH152</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 248 - Digital System Design</b> <i>ENGR111&amp;112;PHYS208;CHEM107&amp;117;MATH152</i>	4	3-3
<input type="checkbox"/>	<input type="checkbox"/>	University Core Curriculum <sup>A</sup> <i>See university approved list</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	University Core Curriculum <sup>A</sup> <i>See university approved list</i>	3	3-0

		16 credits	Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>MATH 308 - Differential Equations</b> <i>MATH251</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	<b>MATH 311 - Topics in Applied Math I</b> <i>MATH308c</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 214 - Electrical Circuit Theory</b> <i>ENGR111&amp;112;PHYS208;CHEM107&amp;117;MATH308c</i>	4	3-3
<input type="checkbox"/>	<input type="checkbox"/>	University Core Curriculum <sup>A</sup> <i>See university approved list</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	University Core Curriculum <sup>A</sup> <i>See university approved list</i>	3	3-0

JUNIOR		16 credits	Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>PHYS 222 - Modern Phys for Engrs</b> <i>PHYS208;MATH308c</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 314 - Signals and Systems</b> <i>ECEN214;MATH308</i>	3	3-1
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 322 - Electric and Magnetic Fields</b> <i>ECEN214;PHYS208;MATH311</i>	3	3-1
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 325 - Electronics</b> <i>ECEN314c;MATH311</i>	4	3-4
<input type="checkbox"/>	<input type="checkbox"/>	Communications Elective <sup>B</sup> <i>See university approved list</i>	3	3-0

			Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 303 - Random Signals and Systems</b> <i>MATH308</i>	3	3-1
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 350 - Comp Architecture and Design</b> <i>ECEN248</i>	4	3-3
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 370 - Elec Props of Materials</b> <i>PHYS222</i>	3	3-1
<input type="checkbox"/>	<input type="checkbox"/>	Technical Elective <sup>C</sup> <i>See department approved list</i>		
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		

SENIOR			Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 403 - Electrical Design Lab I</b> <i>Comm Elec;ECEN303,314,322,325,350,370</i>	3	2-2
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		

			Cr	Th-Pr
<input type="checkbox"/>	<input type="checkbox"/>	<b>ECEN 404 - Electrical Design Lab II</b> <i>ECEN403</i>	3	2-3
<input type="checkbox"/>	<input type="checkbox"/>	ENGR/PHIL 482 - Ethics and Engr <sup>D</sup> <i>Senior classification</i>	3	3-0
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		
<input type="checkbox"/>	<input type="checkbox"/>	ECEN Elective <sup>C</sup> <i>See department approved list</i>		

<input type="checkbox"/>	<input type="checkbox"/>	ICD Elective <sup>A</sup> <i>See university approved list</i>	3	3-0
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<input type="checkbox"/>	<input type="checkbox"/>	ICD Elective <sup>A</sup> <i>See university approved list</i>	3	3-0
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**A** Students must select from: POLS 206 & 207 (3 cr each), American History (6 cr), Social and Behavioral Sciences Elective (3 cr), Creative Arts Elective (3 cr), and International and Cultural Diversity (ICD) Electives (6 cr). Some ICD Electives also count toward Creative Arts, Social and Behavioral Sciences or American History. See TAMU catalog for complete list of approved courses: <http://catalog.tamu.edu/>

**B** Select from ENGL 210, COMM 205 or 243.

**C** See advising office for list of approved electives

**D** ENGR/PHIL 482 also fulfills the UCC Language, Philosophy & Culture requirement.

Courses in **bold** must be completed with a C or better.

Two years of the same foreign language/sign language (high school) or two semesters of the same foreign language (college) are required for graduation.

