

# ELECTRICAL ENGINEERING - Class of 2014

Total Credits = **122 -124**

## Freshman Year *Fall* Semester

Course Code	Description	Cr	
CHM 101	General Chemistry I Lec [GE-N]	3	
CHM 102	General Chemistry I Lab	1	
EGR 105	Foundations of Engineering I	1	
MTH 141	Intro Calculus w/Analytic Geom [GE-MQ]	4	
PHY 203	Elementary Physics I Lect [GE-N]	3	
PHY 273	Elementary Physics I Lab [GE-N]	1	
	General Education Elective*	3	

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## Freshman Year *Spring* Semester

Course Code	Description	Cr	
CSC 200	Computer Problem Solving	4	
ECN 201	Principles of Microeconomics [GE-S]	3	
EGR 106	Foundations of Engineering II	2	
MTH 142	Intermed Calculus w/Analytic Geom	4	
PHY 204	Elementary Physics II Lec [GE-N]	3	
PHY 274	Elementary Physics II Lab [GE-N]	1	

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## Sophomore Year *Fall* Semester

Course Code	Description	Cr	
ELE 201	Digital Circuit Design	3	
ELE 202	Digital Circuit Design Lab	1	
MTH 362	Advanced Engineering Mathematics I	3	
PHY 205	Elementary Physics III Lec [GE-N]	3	
PHY 275	Elementary Physics III Lab [GE-N]	1	
	General Education Elective*	3	

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## Sophomore Year *Spring* Semester

Course Code	Description	Cr	
ELE 205	Microprocessors	2	
ELE 206	Microprocessor Lab	1	
ELE 212	Linear Circuit Theory	3	
ELE 215	Linear Circuits Lab	2	
MTH 243	Calculus for Functions of Several Vars	3	
PHY 306	Elementary Modern Physics	3	

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## Junior Year *Fall* Semester

Course Code	Description	Cr	
ELE 313	Linear Systems	3	
ELE 331	Intro to Solid State Devices	4	
ELE 338	Electronics I	3	
ELE 339	Electronics I Lab	1	
MTH 451 <i>or</i> ISE 411	Intro to Probability and Statistics <i>or</i> Probability and Statistics for Engineers	3	
	General Education Elective*	3	

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## Junior Year *Spring* Semester

Course Code	Description	Cr	
ELE 301	Electronic Design Automation	3	
ELE 302	Electronic Design Automation Lab	1	
ELE 314	Linear Systems and Signals	3	
ELE 322	Electromagnetic Fields I	4	
ELE 343	Electronics II	3	
ELE 344	Electronics II Lab	1	

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## Senior Year *Fall* Semester

Course Code	Description	Cr	
ELE 400	Intro to Professional Practice	1	
ELE 480	Capstone Design I	3	
	Electrical Engineering Design Elective**	4	
	Professional Elective**	3-4	
	General Education Elective*	3	

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## Senior Year *Spring* Semester

Course Code	Description	Cr	
ELE 481	Capstone Design II	3	
	Electrical Engineering Design Elective**	3-4	
	General Education Elective*	3	
	General Education Elective*	3	
	Free Elective	3	

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\* Note the following *specific* requirements and restrictions for General Education [GE] electives:

-Refer to *specific* Electrical Engineering General Education *course requirements* (see 2014 ELE Check Sheet).

-[GE-MQ] Additional [GE-MQ] electives are restricted to MTH 111 (*only if taken prior to passing MTH 141*), BUS 111, and STA 220 only.

-[GE-ECw] *Must* take at least *one* General Education course in *writing* [GE-ECw].

-[GE-ECw] Can only take *one* of the following **100-level** writing courses for General Education credit [GE-ECw]: WRT 104, WRT 105, WRT 106.

\*\* **Electrical Engineering Design Electives** are chosen as follows: *two* (2) courses from ELE 401/402, 423, 427/428, 432, 435/436, 444/445, 447/448, 457, or 458/459.

\*\*\* **Professional Elective** is chosen as follows: *one* (1) course from: BME 462, 464/465, 468; BME/ELE 461; ELE 405/406, 408/409, 437, 438, 470, or *one* (1) additional Electrical Engineering Design Elective.

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## GENERAL EDUCATION [Gen Ed] REQUIREMENTS *(Effective Fall 2010)*

**Please carefully note the following regarding completion of your degree requirements.**

- 1) The Gen Ed requirements shown below are not retroactive to any previous catalog years.**

♦♦♦This means that if you choose to follow the Gen Ed requirements shown, **you are required to follow any and all other changes to the required courses for your major** (see 2014 Curriculum Sheet and Check Sheet on the COE web page).

2) If you change engineering majors, then you are **required** follow the Gen Ed requirements for that major. ***These requirements vary by major (see 2014 Curriculum Sheet and Check Sheet on the COE web page).***

3) If you are considering following the new Gen Ed requirements shown, ***you must meet with your advisor to discuss the implications this will have on your degree progress.***

4) You ***must*** also notify the Associate Dean of Engineering (102 Bliss Hall) ***once you decide*** that you want to follow the revised Gen Ed requirements.

GENERAL EDUCATION [GE] COURSES						
<b>BREADTH</b> At least one course in <i>each</i> of the Gen Ed Areas						
Sem	Course	Cr	Grade	QP	Note	
***English Communication- <i>Writing</i> [GE-ECw]						
	WRT	3				
Mathematical and Quantitative Reasoning [GE-MQ]						
	<i>Satisfied by</i> MTH 141	4	---	---	---	
Fine Arts & Literature [GE-A]						
		3				
Foreign Language/Culture [GE-FC]						
		3				
Letters [GE-L]						
		3				
Natural Sciences [GE-N]						
	<i>Satisfied by</i> CHM 101	3	---	---	---	
Social Sciences [GE-S]						
	ECN 201	3				
<b>DEPTH</b> At least one additional course in 3 <i>different</i> Gen Ed Areas Remainder are taken in <i>any</i> Gen Ed Area/Areas						
Sem	Course	Cr	Grade	QP	Note	
Natural Sciences [GE-N]						
---	<i>Satisfied by Required Courses</i>	12	---	---	---	
*** <i>Two</i> additional courses: <i>one</i> from EC/ECw, and <i>one</i> from MQ; A; FC; L; S						
	[GE-EC/ECw]	3				
	[GE-MQ; A; FC; L; S]	3				
<b>FREE ELECTIVE</b>						
		3				
<b>OTHER COURSES (<i>not for degree credit</i>)</b>						

**\*\*\* Note the following *specific* requirements and restrictions for General Education [GE] electives:**

**-[GE-MQ]** Additional **[GE-MQ]** electives are restricted to **MTH 111** (*only if taken prior to passing MTH 141*), **BUS 111**, and **STA 220** only.

-[GE-ECw] **Must** take at least *one* General Education course in *writing* [GE-ECw].

-[GE-ECw] Can only take **one** of the following **100-level** writing courses for General Education credit [GE-ECw]: WRT 104, WRT 105, WRT 106.

[illegible]