

ELECTRICAL ENGINEERING - Class of 2015

Total Credits = **123 -126**

Freshman Year *Fall* Semester

Course Code	Description	Cr	
CHM 101	General Chemistry I Lec [GE-N]	3	
CHM 102	General Chemistry I Lab	1	
ECN 201	Principles of Microeconomics [GE-S]	3	
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	

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Freshman Year *Spring* Semester

Course Code	Description	Cr	
CSC 200	Computer Problem Solving	4	
EGR 106	Foundations of Engineering II	2	
ELE 101	Intro to Electrical Engineering	1	
MTH 142	Intermed Calc with Analytic Geom [GE-MQ]	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	
	General Education Elective*	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	
	Electrical Engineering Design Elective**	3-4	
	Professional Elective**	3-4	

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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 2015 *ELE Check Sheet*).

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

-[GE-EC/ECw] Must take at least *six (6)* credits of General Education [GE-EC/ECw], with at least *one (1)* course in writing, [GE-ECw].

-[GE-ECw] Can only take *one (1)* 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: *three (3)* courses from ELE 401/402, 423, 427/428, 432, 435/436, 444/445, 447/448, 457, or 458/459. At least *one (1)* course must include a lab component. Furthermore, *one (1)* course must be from ELE 401/402, 423, 432, 444/445, or 447/448.

*** **Professional Elective** is chosen as follows: *one (1)* course from: BME 462; BME/ELE 461; ELE 405/406, 408/409, 437, 438, 470, *or one (1)* additional Electrical Engineering Design Elective; MTH 215; or, by prior approval of the chairperson

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GENERAL EDUCATION [Gen Ed] REQUIREMENTS (*Effective Fall 2011*)

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 2015 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 2015 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 to follow the revised Gen Ed requirements.

GENERAL EDUCATION [GE] COURSES											
BREADTH At least one course in <i>each</i> of the Gen Ed Areas						DEPTH 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	Sem	Course	Cr	Grade	QP	Note
***English Communication-Writing [GE-ECw]						Natural Sciences [GE-N]					
	WRT	3				---	Satisfied by Required Courses	12	---	---	---
Mathematical and Quantitative Reasoning [GE-MQ]						Mathematical and Quantitative Reasoning [GE-MQ]					
	Satisfied by MTH 141	4	---	---	---		Satisfied by MTH 142	4	---	---	---
Fine Arts & Literature [GE-A]						***One additional course from: EC/ECw					
		3					[GE-EC/ECw]	3			
Foreign Language/Culture [GE-FC]						Free Elective					
		3						3			
Letters [GE-L]						Other Courses (<i>not for degree credit</i>)					
		3									
Natural Sciences [GE-N]											
	Satisfied by CHM 101	3	---	---	---						
Social Sciences [GE-S]											
	ECN 201	3									

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

-[GE-EC/ECw] ***Must*** take at least *six (6)* credits from General Education [GE-EC/ECw], with at least *one (1)* course in *writing* [GE-ECw].

-[GE-ECw] Can only take *one (1)* of the following **100-level** writing courses for General Education credit [GE-ECw]: WRT 104, WRT 105, WRT 106.

Notes