

## Bachelor of Science in Electrical Engineering (Catalog year 2014-2015)

This is only a suggested schedule; always refer to the Official University Catalog for verification

**Courses in bold font are critical tracking courses for this major and must earn a C or better within 2 attempts**

**All courses that have a \* require a C or better.**

Courses Prefix and number	Credits	Course title	Projected Offer	Pre-Requisites	Completed Yes or No
<b>Semester 1</b>					
<b>CHM2045</b> or <b>CHM2095*</b>	3	<b>Gen. Chemistry/Chem. for Engineers</b>	F/SP/SS	<b>MAC 1147 or passing grade in CHM 1025; Coreq: CHM 2045L.</b>	
<b>CHM2045L*</b>	1	<b>General Chemistry Lab</b>	F/SP/SS	<b>Coreq: CHM 2045</b>	
<b>MAC2311*</b>	4	<b>Analytical Geometry &amp; Calculus 1</b>	F/SP/SS-C	<b>See catalog</b>	
HUM2305	3	What is the Good Life?	F/SP/SS	Freshmen/non-AA transfers	
EEL2000	2	Intro to Electrical & Computer Engineering	F/SP	none	
<b>Semester 2</b>					
<b>General Education-B</b> or <b>Physical Sciences P*</b>	3	<b>GEN-ED B</b> <b>GEN-ED P</b>	<b>F/SP/SS</b>	<b>See catalog</b>	
<b>MAC 2312*</b>	4	<b>Analytic Geometry and Calculus 2</b>	<b>F/SP/SS</b>	<b>MAC2311</b>	
<b>PHY 2048*</b>	3	<b>Physics with Calculus 1</b>	<b>F/SP/SS</b>	<b>PHY2020 MAC2311 co MAC2312</b>	
<b>PHY 2048*L</b>	1	<b>Physics with Calculus 1 Laboratory</b>	<b>F/SP/SS</b>	<b>CO-RBQ PHY2048</b>	
ENC3256	3	Writing for Engineering	F/SP	NONE	
<b>Semester 3</b>					
<b>MAC2313*</b>	4	<b>Analytic Geometry and Calculus 3</b>	F/SP	MAC2312	
<b>PHY2049*</b>	3	<b>Physics with Calculus 2</b>	F/SP	PHY2048 & MAC2312 co MAC2313	
<b>PHY2049L*</b>	1	<b>Physics with Calculus 2 Laboratory</b>	F/SP/SS	Co-req PHY2049	
Computer Programming	3	See Approved list (C or C++)	F/SP	See catalog	
GE-S/H	3	General Education	F/SP/SS	See catalog	
GE-S/H	3	General Education	F/SP/SS	See catalog	
<b>Semester 4</b>					
<b>MAP2302*</b>	3	<b>Elementary Differential Equations</b>	<b>F/SP</b>	<b>MAC2312</b>	
EEL3111C*	4	Circuits 1	F/SP/SS	MAC2313 and PHY2049; Co-req MAP2032	
EEL3135*	4	Introductions to Signals and Systems	F/SP	(MAC2312/13) EEL3105 and MAS3114 or MAS4105	
MAS3114	3	Computational Linear Algebra	F/SP/SS-A	MAC 2312, MAC 2512 or MAC 3473 with a minimum grade of C and experience with a scientific programming language	
(Summer A/B/C)	5				
GE-S/H	3	General Education Social Behavior Sciences	F/SP/SS	See catalog	
Elective	2	General Education Humanities	F/SP/SS	See catalog	
<b>Semester 5</b>					
<b>EEL3472*</b>	3	<b>Electromagnetic Fields &amp; Applications 1</b>	F/SP	EEL3111C	
<b>EEE3396*</b>	3	<b>Solid State Devices</b>	F/SP	EEL3111C	
<b>EEL3701C*</b>	4	<b>Digital Logic and Computer Systems</b>	F/SP/SS	See catalog	
GE-S or GE-H	3	General Education Social Sciences or Humanities	F/SP/SS	See catalog	
<b>Semester 6</b>					
<b>EEE3308C*</b>	4	<b>Electronic Circuits 1</b>	F/SP/SS	EEL3111C	
<b>EEL3112*</b>	3	<b>Circuits 2</b>	F/SP	EEL3111C EEL3135 EEL3105	
EE Specialization #1	4	See approved list	F/SP	See catalog	
College Breadth #1	3	See approved list	F/SP/SS	See catalog	
<b>Semester 7</b>					
College Breadth #2	3	See approved list	F/SP/SS	See catalog	
<b>EEL3923C*</b>	3	<b>Electrical &amp; Computer Design 1</b>	F/SP	EEL3111C EEL3701C EEL4744C	
EE Specialization #2	4	See approved list	F/SP	See catalog	
Technical Elective	3	See approved list	F/SP	See catalog	
<b>Semester 8</b>					
<b>STA3032</b>	3	<b>Engineering Statistics</b>	F/SP	MAC2311	
College Breadth #3	3	See approved list	F/SP	See catalog	
Technical Elective	3	See approved list	F/SP	See catalog	
Technical Elective	3	See approved list	F/SP	See catalog	
<b>Semester 9</b>					
<b>EEL4924C*</b>	3	<b>Electrical &amp; Computer Design 2</b>	F/SP	EEL3923C	
Technical Elective	3	See approved list	F/SP	See catalog	
Technical Elective	3	See approved list	F/SP	See catalog	
Technical Elective	2-3	See approved list	F/SP	See catalog	
EE Specialization #3	3-4	See approved list	F/SP	See catalog	
<b>Total Credits</b>	<b>131</b>				

## Approved Electives for Electrical Engineering (BSEE)

For course scheduling check <http://www.registrar.ufl.edu/soc/index.html> for which semester the courses are offered

Check the catalog for the appropriate pre-requisites at <https://catalog.ufl.edu/ugrad/current/courses/Pages/course-descriptions.aspx>

### Computer Elective List- 3 credits

EEL3834 Programming for ECE (3) **or**  
COP2271 Computer Programming for Engineers and COP2271L Computer Programming Lab (2/1) **or**  
COP3275 Programming Using C (3)

### Electrical Engineering Specialization List- 11-12 credits

Areas of Specialization (choose 3 out 5)  
Must do labs for EEL3211, EEL4514 EEL4657 if combined as specialization

#### Area 1

EEL3211- Basic Electric Energy Engineering (3)  
EEL4201L- Electrical Energy Conversion Lab (1)

#### Area 2

EEE4306C Electronic Circuits II (3)  
EEE4310C Digital Integrated Circuits (3)

#### Area 3

EEL4514 Comm. Systems and Components (3)  
EEL4514L Communication Laboratory (1)

#### Area 4

EEL4657 Linear Control Systems (3)  
EEL4657L Linear Controls Laboratory (1)

#### Area 5

EEL4744C Microprocessor Applications (4)

### College Breadth (choose 9 hours)

*Any College of Engineering courses (excluding courses offered by the ECE Department)*

Any 3000-4000-level advanced math course- MAA, MAD, MAP, MAS, excluding MAS3114

Physics Minor

### Technical Electives

EEE 4306C Electronic Circuits II  
EEE 4310C Digital Integrated Circuits  
EEE 4329 Future of Microelectronics Technology  
EEE 4331 Microelectronic Fabrication Technologies  
EEE 4373 Radio-Frequency Electronics  
EEE 4420 Introduction to Nanodevices  
EEL 3211 Basic Electric Energy Engineering  
EEL 3402 Remote Sensing in Engineering: Science, Sensors and Applications  
EEL 4201L Electrical Energy Conversion Laboratory  
EEL 4242C Power Electronic Circuits  
EEL 4351 Electronic Device Fundamentals  
EEL 4440 Optical Communication Systems  
EEL 4445 Optics for Engineers  
EEL 4446 Laser Theory and Design  
EEL 4458 Fundamentals of Photonics  
EEL 4461 Antenna Systems  
EEL 4473 Electromagnetic Fields and Applications 2  
EEL 4492 Lightning  
EEL 4514 Communication Systems and Components  
EEL 4514L Communication Laboratory  
EEL 4516 Noise in Devices and Communication Systems  
EEL 4523 Audio Engineering  
EEL 4598 Data Computer Communications  
EEL 4610 State Variables and Controls  
EEL 4657 Linear Control Systems  
EEL 4657L Linear Controls Laboratory  
EEL 4665C Intelligent Machines Design Laboratory  
EEL 4712C Digital Design-  
EEL 4713C Digital Computer Architecture  
EEL 4720 Reconfigurable Computing  
EEL 4736 Principles of Computer System Design  
EEL 4744C Microprocessor Applications\*  
EEL 4750C Introduction to Digital Signal Processing  
EEL 4905 Individual Problems in Electrical Engineering  
EEL4912 IPPD1  
EEL4930 Special Topics

Any 5000 level of ECE graduate courses

Any 6000 level of ECE graduate courses