CURRICULUM LEADING TO THE BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

NTY 6/5/2017

Catalog Year: 2015 Hours required 131

Courses with an asterisk (*) require a grade of C or higher. Students must have a grade of C or higher in any EEL/EEE-prefixed breadth course in order to take any course for which it is the prerequisite. Any 3000/4000 level EEL/EEE-prefixed course not taken to satisfy the breadth or depth requirement can be applied as EE Technical Electives excluding EEL 3003, which does not apply towards degree requirements.

General Education and Critical Tracking Courses: 48 Credits

ENC3246 Profes Communications for Engrs. (3)
Humanities (GE-H) (3)
IUF1000 What is the Good Life (3)
Social Science (GE-S) (6)
GE-C (3)
To lessen the number of credits required, students are Encouraged to take courses which satisfy both International Studies & Diversity and Humanities/ Social Sciences.

MAC2311 Analytic Geometry & Calc 1 (4)
MAC2312 Analytic Geometry & Calc 2 (4)
MAC2313 Analytic Geometry & Calc 3 (4)
MAP2302 Elem Differential Equations (3)

CHM2045 General Chemistry 1 (3)
or CHM 2095 Chemistry for Engineers 1 (3)
CHM 2045L General Chemistry Lab (1)
Biological Science (GE-B) (3)
Or CHM 2046 General Chemistry 2
Or CHM 2096 Chemistry for Engineers 2

PHY2048 Physics with Calculus 1 (3)
PHY2048L Physics Lab (1)
PHY2049 Physics with Calculus 2 (3)
PHY2049L Physics Lab (1)

Technical Courses: 18 Credits

MAS3114 Computational Linear Algebra (3)
STA3032 Engineering Statistics (3)
Computer Programming Elective (3) Choose 1
COP2271 & COP 2271L Computer Program for Engineers & Lab or
COP3275 Program Using C or
EEL3834 Program for ECE

Interdisciplinary Electives (Take 9 credits)
Any 3000/4000-level course in the College of Engineering (non-ECE) courses or any 3000/4000-level course from the Math Dept with an MAA, MAD, MAP, MAS prefix or any 3000/4000 level courses from the Physics Dept,

Electrical Engineering Core: 30 Credits*

EEL3000 Introduction to ECE* (2)
EEL3111C Circuits 1* (4)
EEL3008 Physics of Electrical Eng.* (3)
EEL3112 Circuits 2* (3)
EEL3135 Signals and Systems* (4)
EEL3701C Digital Logic & Computer Sys* (4)
EEL3744C Microprocessor Applications* (4)
EEL3923C Design 1* or IPPD 1 (3)
EEL4924C Design 2* or IPPD 2 (3)

EE Breadth Courses (12) Choose 3 courses*

EEE3308C Electronic Circuits 1 (4)
EEE3396C Solid State Devices (4)
EEE4260C Bioelectrical Systems (4)
EEL3211C Basic Electric Energy (4)
EEL3472C Electromagnetic Fields & Apps 1(4)
EEL4511C Real-Time DSP (4)
EEL4514C Communications (4)
EEL4657C Linear Controls (4)
EEL4712C Digital Design (4)

EE Depth Courses (6)

Select a course from 2 different EE Breadth Areas (see list)

EE Technical Electives (17)

Any 3000 level or higher course in ECE with the exception of EEL 3003 which does not apply towards BSEE degree requirements.

Electrical Engineering Advisor:
Nicole Young: nicolet@ece.ufl.edu
230 Larsen Hall
ECE Student Services Offices
http://ufece.blogspot.com/
www.ece.ufl.edu

IPPD: http://www.ippd.ufl.edu/

^Taking additional EE breadth and depth courses will count towards EE Technical Elective requirements.
^^ BME4931 course code are special topics for the BME major. Please check with EE advisor for BME enrollment

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Approved EE Depths Courses Select a course from 2 different EE Breadth Areas
EEE3308C Depth Courses: EEE4306, EEE4310, EEE4373
EEE3396C Depth Courses: EEE4329, EEE4331, EEE4420
EEE4260C Depth Courses: BME4931 Neural Eng. and BME4931 Bioinformatics
EEL3211C Depth Courses: EEL4251
EEL3472C Depth Courses: EEL4458, EEL4461, EEL4473
EEL4511C Depth Courses: EEL4750
EEL4514C Depth Courses: EEL4516 and EEL4598
EEL4657C Depth Courses: EEL4610
EEL4712C Depth Courses: EEL4713C, EEL4720, EEL4736

Please check schedule of courses for semester availability

Electrical Engineering Technical Electives: Must take 17 credits

BME4931 Neural Engineering**
BME4931 Neural Systems Model**
EEE4210 Intro to Biophotonics
EEE4306/5320 Elec. Circuits 2
EEE4310/5322 Dig. Integrated Circ.
EEE4329/5400 Fut. of Micro. Tech.
EEE4331/5406 Microelec Fab Tech
EEE4373/5934 RF Electronics
EEE4404/5408 Mixed IC Test
EEE4420/5426-Intro to Nanodev.
EEE4701 Automated HW/SW Ver.
EEE4720/EEL5934- Acoustics
EEE5364 Fund. Data Convert
EEE6287 Brain Machine Interface
EEE6321 Analog IC Design 2
EEE6323 Digital IC Design 2
EEE6328 Microwave IC
EEE6374 RF CKts & Systems
EEE6428 Comp. Nanoelectronics
EEE6503 Digital Filtering
EEE6586 Automatic Speech Proc.
EEE6591 Wireless Networks
EEL3402 Remote Sensing
EEL4222 Resonant MEMS
EEL4242C/5317 Power Electronics
EEL4251/EEL5934-Power Sys. Anal.
EEL4271/EEL5934- Power Sys. Prot.
EEL4287/EEL5934- Smart Grid
EEL4403 Comput. Photography
EEL4412/EEL5417- App Mag & Mag Mtls
EEL4421 RF/Microwave Pass. Circ.
EEL4440- Optical Comm. Sys.
EEL4446/EEL5447 Laser Theory & Des.
EEL4458/EEL5441- Fund. Of Phot.
EEL4461- Antenna Systems
EEL4473/EEL6486 E-mag Fields & Apps 2
EEL4495 Lightning
EEL4516/5544 Noise in Lin Sys
EEL4523 Audio Engineering
EEL4540/EEL5547- Intro to Radar
EEL4598/5718 Data Cpr Comm
EEL4599 Wireless and Mobile Net.
EEL4610/5182 State Variable Meth
EEL4713C Digital Comp. Arc
EEL4720/5721 Reconfig Cpr
EEL4732 Adv. Syst. Programming
EEL4736/5737 Prin Cpr Sys Design
EEL4750/EEE5502 Found. of DSP
EEL4853 Cross-Layered Syst. Sec.
EEL4930 Elem. of Mach. Learning
EEL4930 Intro to HW Security
EEL4930 Machine Learning
EEL4930 Microprocessor Apps 2
EEL4930 Mod. Memory Dev. Tech.
EEL4930 Plasma Physics for EE
EEL4930 RF/Power Elect. Devices
EEL4930/5225-Principles of MEMS
EEL4930/5934 Biophotonics
EEL4930/EEL6935 IC Test 2
EEL5451L- Photonics Lab
EEL6287 Brain Machine Interfaces
EEL6487 E-Mag Fields & Apps 3
EEL6507 Queueing Theory
EEL6509 Wireless Comm
EEL6532 Info Theory
EEL6533 Stat Dec Theory
EEL6535 Digital Comm
EEL6550 Error Cor Coding
EEL6614 Modern Control Theory
EEL6617 Linear Multivar Control
EEL6619 Robust Control System
EEL6706 Fault Tolerant Cpr
EEL6763 Parallel Cpr Arch
EEL6781 Automatic Cpr.
EEL6814 Neural Networks
EEL6892 Virtual Computers

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