

College of Engineering & Computational Sciences

B.S. Electrical Engineering ~ Advising Flowchart ~ 2015-2016

(See back for legend and list of Electrical Electives)

Freshman Year

PAGN101 0.5 F
Phys. Ed. I

LAIS100 4 FS
Nat. & Hmn. Values

CHGN121 4 FS
Prin. Chemistry I

CSM101 0.5 FS
Fr. Seminar

Distributed
Science Elective #

MATH111 4 FSs
Calc. I
Pre: Precalc

PAGN102 0.5 S
Phys. Ed. II
Pre: PAGN101

Distributed
Science Elective #

PHGN100 4.5 FSs
Physics I
Pre: MATH111
Co-req: MATH112

MATH112 4 FSs
Calc. II
Pre: MATH111 (≥C)

EPIC151 3 FSs
Design I

Sophomore Year

PAGN2XX 0.5 FS
Phys. Ed.

LAIS200 3 FS
Human Systems
Pre: LAIS100

Distributed
Science Elective #

PHGN200 4.5 FSs
Physics II
Pre: PHGN100 (≥C)
Co-req: MATH213

MATH213 4 FSs
Calc. III
Pre: MATH112 (≥C)

CSCI261 3 FSs
Programming
Concepts

PAGN2XX 0.5 FS
Phys. Ed.

EBGN201 3 FSs
Prin. of Economics

EENG284 4 FS
Digital Logic
Pre: CSCI261
Co: EENG282 or
EENG281 or PHGN215

EENG282 4 FS
Electrical Circuits
Pre: PHGN200

MATH225 3 FSs
Diff. Eqn.
Pre: MATH112 (≥C)

Junior Year

EENG383 4 FS
Microcomputers
Pre:
EENG281/282/298/
PHGN215, EENG284

EENG310 4 FS
Info. Systems
Pre: EENG281/282/298/
PHGN215, MATH225

MATH332 3 FS
Linear Algebra
Pre: MATH213/223 or
224

EENG307 3 FS
Feedback Cont.
Pre: EENG281/282/298/
PHGN215, MATH225

MEGN361 OR
CEEN241 3 FSs
Statics / Thermo
Pre: (Thermo)
MATH213/223;
(Statics) PHGN100,
MATH112

EENG389 4 FS
Elect. Mach. I
Pre: EENG282/298/
382, Co-req: EENG386

EENG386 3 FS
Eng. EM
Pre: EENG281/282/
298/382, MATH225

EENG385 4 FS
Elec. Dev. & Circ.
Pre: EENG307 or
EENG382

EENG311 3 FS
Info Systems II
Pre: EENG310 or
EENG388

EENG334 3 s
Field Session
Pre: EENG284, 385,
389

Senior Year

ELEC 3 FSs
Elective

H&SS 3 FSs
Mid-level*

EGGN450 1 FS
MEL III
Pre: MEGN351, CEEN311,
EGGN350 or EENG382
Co: EENG307

H&SS 3 FSs
Mid-level

ELEC 3 FSs
Elective

EGGN491 3 FS
Senior Design I
Pre: EENG334

ELEC 3 FSs
Elective

H&SS 3 FSs
400-level*

Free 3 FSs
Elective

Free 3 FSs
Elective

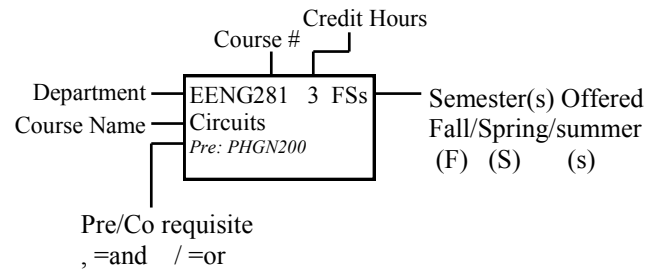
Free 3 FSs
Elective

EGGN492 3 FS
Senior Design II
Pre: EGGN491

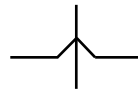
Electrical Electives

Electrical specialty students are required to take three courses from the following list of electrical technical electives: *

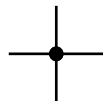
Legend



Shows lines crossing over but not connecting



Shows lines crossing and connecting together



Concurrent Enrollment Allowed
 (Arrow points toward course with pre/co requisite requirement)



CEEN405	Numerical Methods for Engineers
CSCI341	Computer Organization
CSCI410	Elements of Computing Systems
EENG411	Digital Signal Processing
EENG413	Analog and Digital Communications Systems
EENG417	Modern Control Design
EENG421	Semiconductor Physics & Design
EENG425	Introduction to Antennas
EENG427	Wireless Communication Systems
EENG470	Introduction to High Power Electronics
EENG472	Practical Design of Small Renewable Energy Systems
EENG480	Power Systems Analysis
EENG481	Analysis and Design of Advanced Energy Systems
EENG489	Computational Methods in Energy Systems & Power
MATH334	Introduction to Probability
MATH335	Introduction to Mathematical Statistics
MATH455	Partial Differential Equations
MATH440	Parallel Computing for Scientists and Engineers
MEGN330	Introduction to Biomedical Engineering
MEGN441	Introduction to Robotics
PHGN300	Modern Physics I
PHGN320	Modern Physics II: Quantum
PHGN435	Interdisciplinary Microelectronics Processing Laboratory
PHGN440	Solid State Physics
PHGN441	Solid State Physics Applications & Phenomena
PHGN462	Electromagnetic Waves & Optical Physics

*Additional EENG or CSCI 400 level and graduate level classes taught in the EECS department can be considered as tech electives. Talk to your advisor for further guidance. 300 level or higher courses from other departments can be considered by the Department Head.