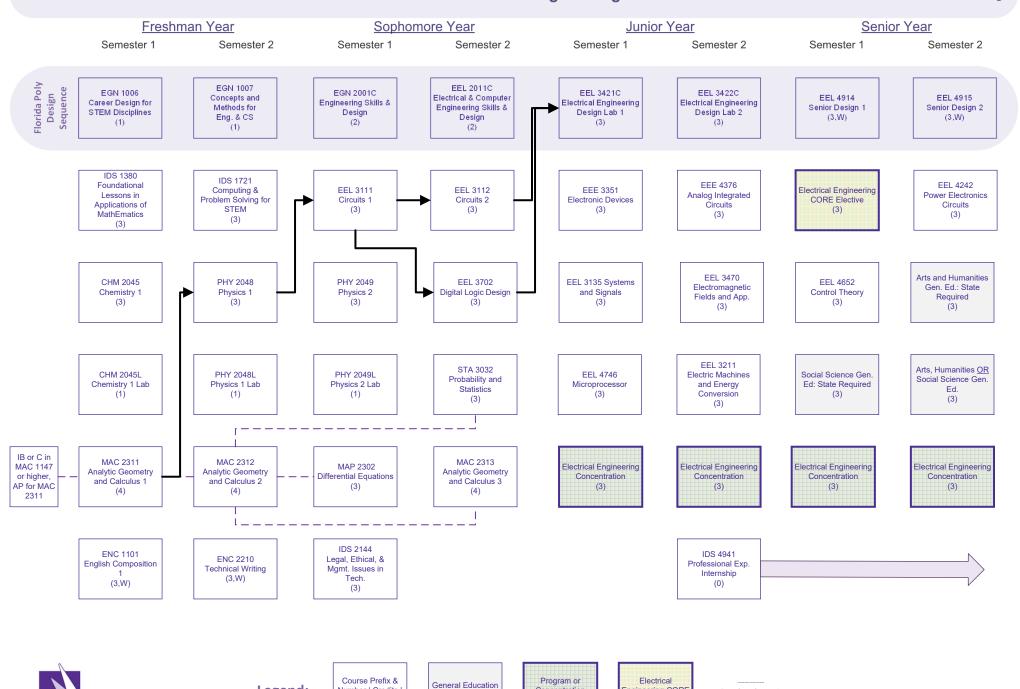
# **BS** in Electrical Engineering



Engineering CORE

Elective | Credits

C grade or better is

required

Concentration

Elective | Credits

Elective | Credits

Legend:

FI ORTDA**POLY** 

Number | Credits |

Course Name

# BS in Electrical Engineering Program/Concentration Electives and General Education

# Program/Concentration Electives

#### Concentrations

### **Advanced Topics**

Complete Twelve (12) credits from any electrical engineering concentration, or electrical engineering core elective courses.

#### **Automotive**

- EEL 4665 Autonomous Perception Systems Credits: 3
- EEL 4220 Electronic Motor Control Credits: 3
- EEL 4332 Intro to Autonomous Vehicles Credits: 3
- EEL 4312 Electric and Hybrid Vehicles Credits: 3

# **Energy**

- EEL 4283 Renewable Energy Systems Credits: 3
- EEL 4276 Smart-Grid and Cyber Physical Security Credits: 3
- EEL 3287 Renewable Energy and Sustainability Credits: 3
- ENV 3049 Life Cycle Assessment and Modeling Credits: 3

#### Robotics

- Select 12 credits (4 courses) from the following electives:
- EEL 4665 Autonomous Perception Systems Credits: 3
- EEL 4220 Electronic Motor Control Credits: 3
- EEL 4664 Kinematics and Control of Robotic Systems Credits: 3
- EEL 4660 Autonomous Robotic Systems Credits: 3
- EEL 4612 Control System Design Credits: 3

# Electrical Engineering CORE Electives

Select one (1) course. Additional Courses in the list count in Advanced Topics.

## **Electrical Engineering Core Electives**

EEL 4448 - Optoelectronics Credits: 3
EEL 4514 - Communication Systems and Components Credits: 3
EEL 4251 - Power System Analysis Credits: 3
EEE 4510 - Digital Signal Processing Credits: 3

# General Education & Technical/Science Electives

#### **Arts and Humanities**

A total of 12 credit hours must be completed in the arts, humanities, and social sciences. Select 6 to 9 credits from the following courses.

## Required for EE majors:

IDS 2144 - Legal, Ethical, and Management Issues in Technology Credits: 3

## At least one course (3 credits) from the following state required list:

- ARH 2000 Art Appreciation Credits: 3
- HUM 2020 Introduction to the Humanities Credits: 3
- LIT 2000 Introduction to Literature Credits: 3
- PHI 2010 Introduction to Philosophy Credits: 3
- MUL 2010 Music Appreciation Credits: 3

#### Optional additional course elective:

HUM 2022 - Explorations in the Humanities Credits: 3

#### **Social Sciences**

A total of 12 credit hours must be completed in the arts, humanities, and social sciences. Select 3 to 6 credits from the following courses.

# At least one course (3 credits) from the following state required list:

- AMH 2010 American History to 1877 Credits: 3
- AMH 2020 American History Since 1877 Credits: 3
- ECO 2013 Principles of Macroeconomics Credits: 3
- POS 2041 American Government Credits: 3
- PSY 2012 General Psychology Credits: 3

# Optional additional course elective:

ECO 2023 - Principles of Microeconomics Credits: 3

