

BS in Electrical Engineering

2025-2026 Catalog

Freshman Year

Sophomore Year

Junior Year

Senior Year

Semester 1

Semester 2

Semester 1

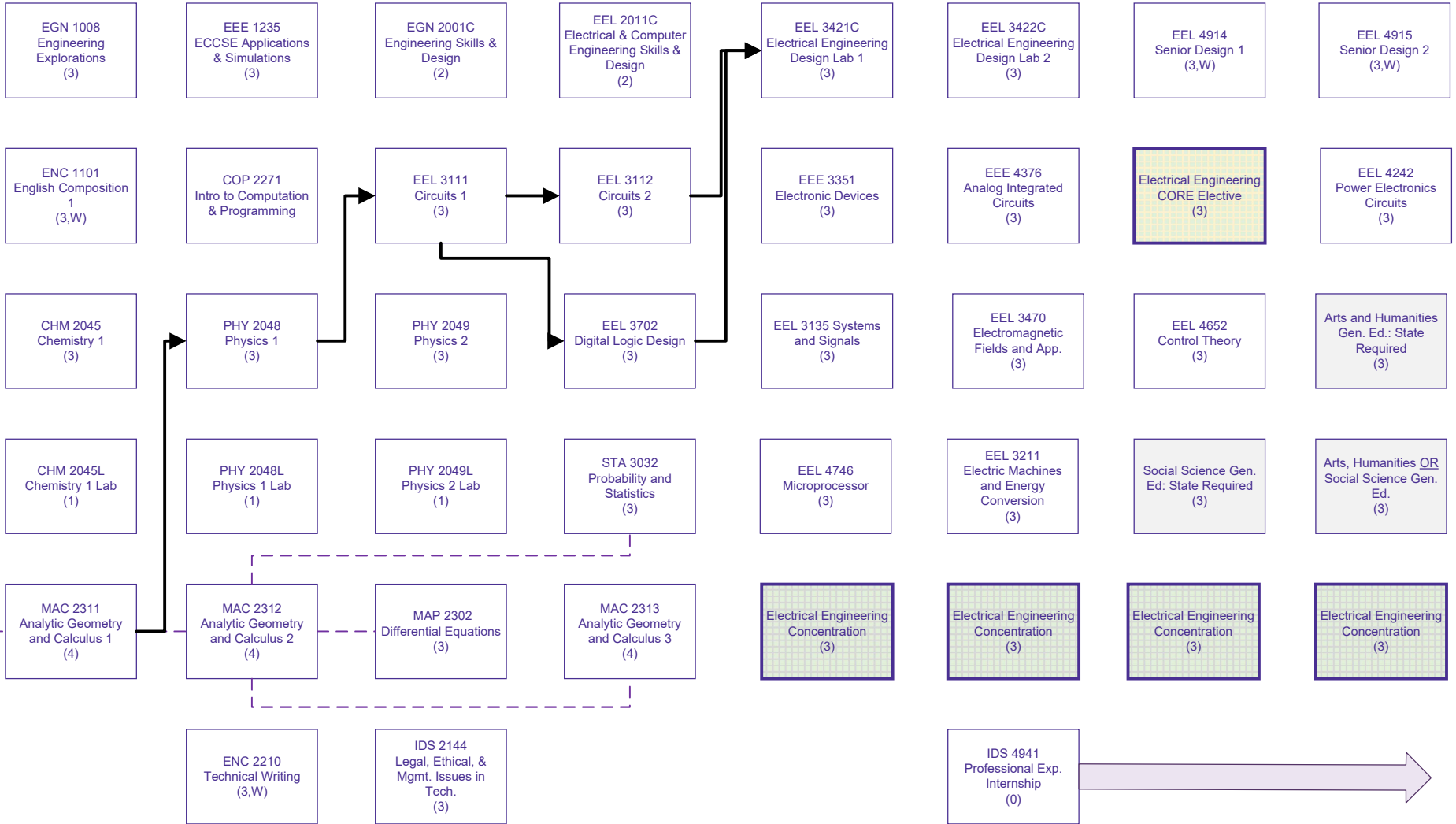
Semester 2

Semester 1

Semester 2

Semester 1

Semester 2



Legend:

Course Prefix & Number | Credits | Course Name

General Education Elective | Credits

Program or Concentration Elective | Credits

Electrical Engineering CORE Elective | Credits

C grade or better is required



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

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