

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year

Semester 1

Semester 2

Semester 1

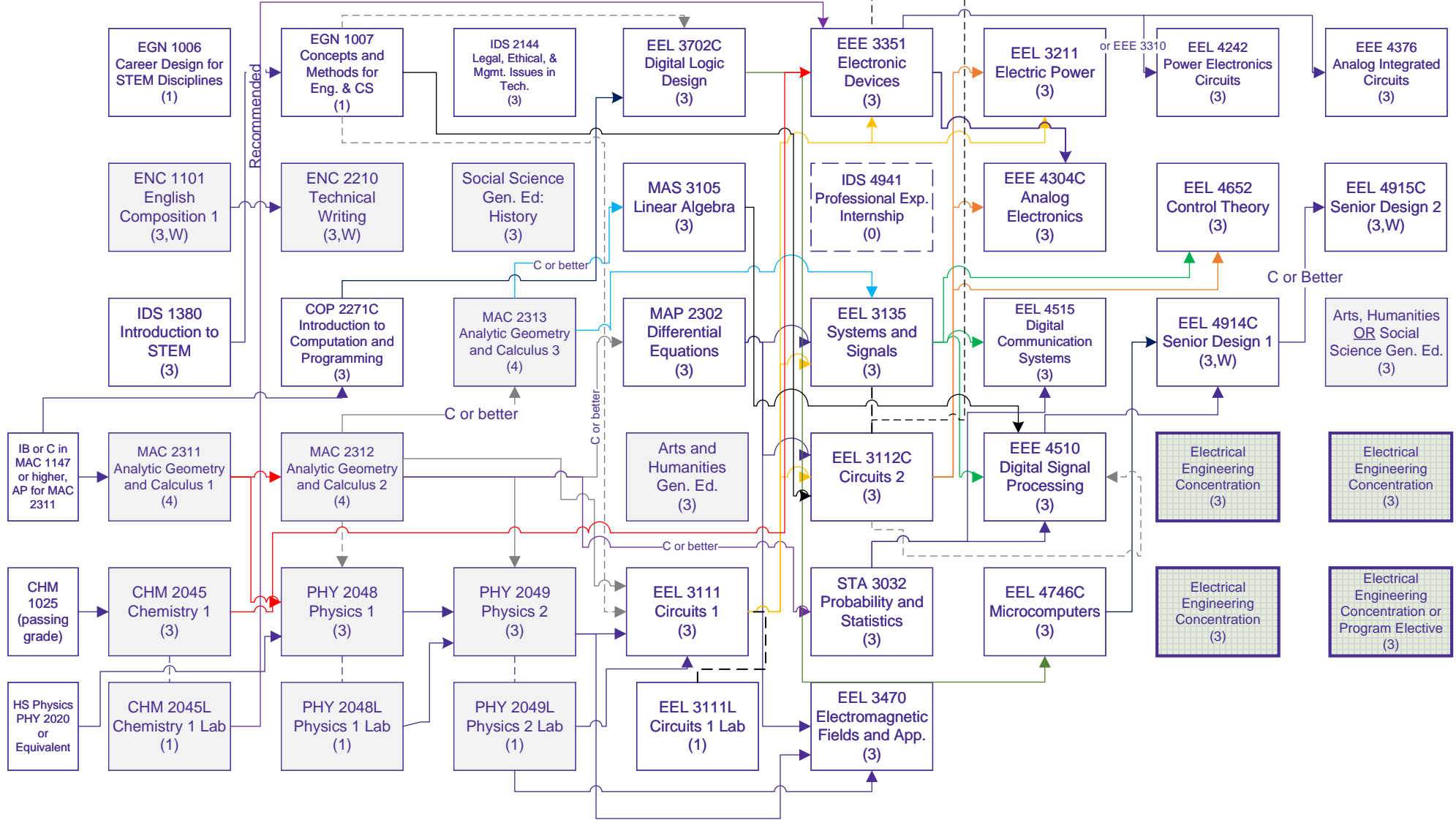
Semester 2

Semester 1

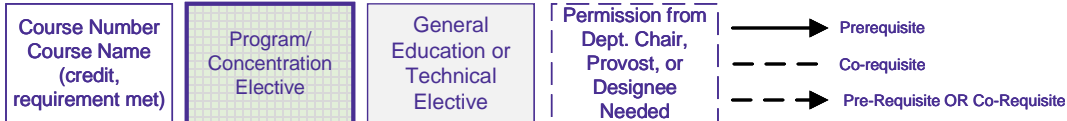
Semester 2

Semester 1

Semester 2



### Legend:



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

2021-2022 Catalog

Program/Concentration Electives

**Advanced Topics**

Complete nine (9) credits from any electrical engineering concentration courses, and three (3) credits from electrical engineering electives.

**Control Systems**

- EEE 4531 Techniques for High Fidelity Signal Acq. (3, EEE 4304C/EEL 4652)
- EEL 4321C Hardware in the Loop Simulation (3, EEE 4531)
- EEL 4612C Control System Design (3, EEL 4652)
- Other EE concentration OR program elective (3)

**Electromagnetics and Communication**

- EEL 4508 Satellite Communications (3, EEL 4515)
- EEL 4421 RF and Microwave Systems (3, EEL 3470)
- EEL 4524 Software Defined Radio (3, EEL 4515, EEE 4510)
- Other EE concentration OR program elective (3)

**Renewable Energy**

- EEL 3287 Renewable Energy and Sustainability (3, MAC 2313, PHY 2049, PHY 2049L, CHM 2015, CHM 2015L)
- EEL 4283 Renewable Energy Systems (3, EEL 3287)
- EEL 4251 Power System Analysis (3, EEL 3112C, MAS 2105)
- Other EE concentration OR program elective (3)

**Autonomous and Electric Vehicles**

- EEL 4220 - Electronic Motor Control (3, EEL 3112C or EML 3811)
- EEL 4312 - Electric and Hybrid Vehicles (3, EEL 3112C or EML 3811)
- EEL 4332 - Intro to Autonomous Vehicles (MAP 2302, COP 2271C, (MAS 3105 or MAS 3114)
- EEL 4333 - Autonomous Vehicle Design and Applications (3, EEL 4332)

**Electrical Engineering (Program Electives)**

- EEL 4290 - Sustainability for Engineering, Technology, and Entrepreneurship (3, EGN 1007C, MAC 2313, PHY 2049, PHY 2049L, CHM 2045, CHM 2045L)
- EEL 3287L - Renewable Energy & Sustainability (1, co-req EEL 3287)
- EEL 4448 - Optoelectronics (3, EEL 3470, EEE 3351)
- EEL 4768C - Computer Architecture and Organization (3, EGN 1007C, STA 3032)
- EEL 4664C - Kinematics and Control of Robotic Systems (3, COP 2271C, EEL 3111, EEL 3111L, MAP 2302, MAC 2313, STA 3032)
- EEL 4220 - Electronic Motor Control (3, EEL 3112C or EML 3811)
- EEL 4759 - Digital Image Processing (3, EEL 3135)
- COP 3337C - Object Oriented Programming (3, COP 2271C)

General Education & Technical/Science Electives

**Arts & Humanities**

Required one (1) from the following:

- ARH 2000 Art Appreciation (3-W)
- HUM 2020 Introduction to Humanities (3-W, ENC 1101)
- LIT 2000 Introduction to Literature (3-W, ENC 1101)
- PHI 2010 Introduction to Philosophy (3-W)

Optional, one (1) from the following OR one more from Arts & Humanities required or Social Sciences:

- HUM 2022 Explorations in the Humanities (3-W)
- IDS 2144 Legal, Ethical, and Management Issues in Technology (3)

**Social Sciences**

Required one (1) from the following:

- AMH 2020 American History Since 1877 (3-W-Civic Literacy)
- ECO 2013 Principles of Macroeconomics (3-W)
- PSY 2012 General Psychology (3-W)

Optional, one (1) from the following OR one more from Social Science required or Arts and Humanities:

- AMH 2010 American History to 1877 (3-W)
- AMH 2930 Special Topics (1 to 3-W)
- ECO 2023 Principles of Microeconomics (3-W)

**Total Program Credits: 120**



**Legend:** Course name (credits-requirement met, pre-requisites/co-requisites)

Last Modified 03/2022