

BS in Computer Engineering

2025-2026 Catalog

Freshman Year

Semester 1

Semester 2

Sophomore Year

Semester 1

Semester 2

Junior Year

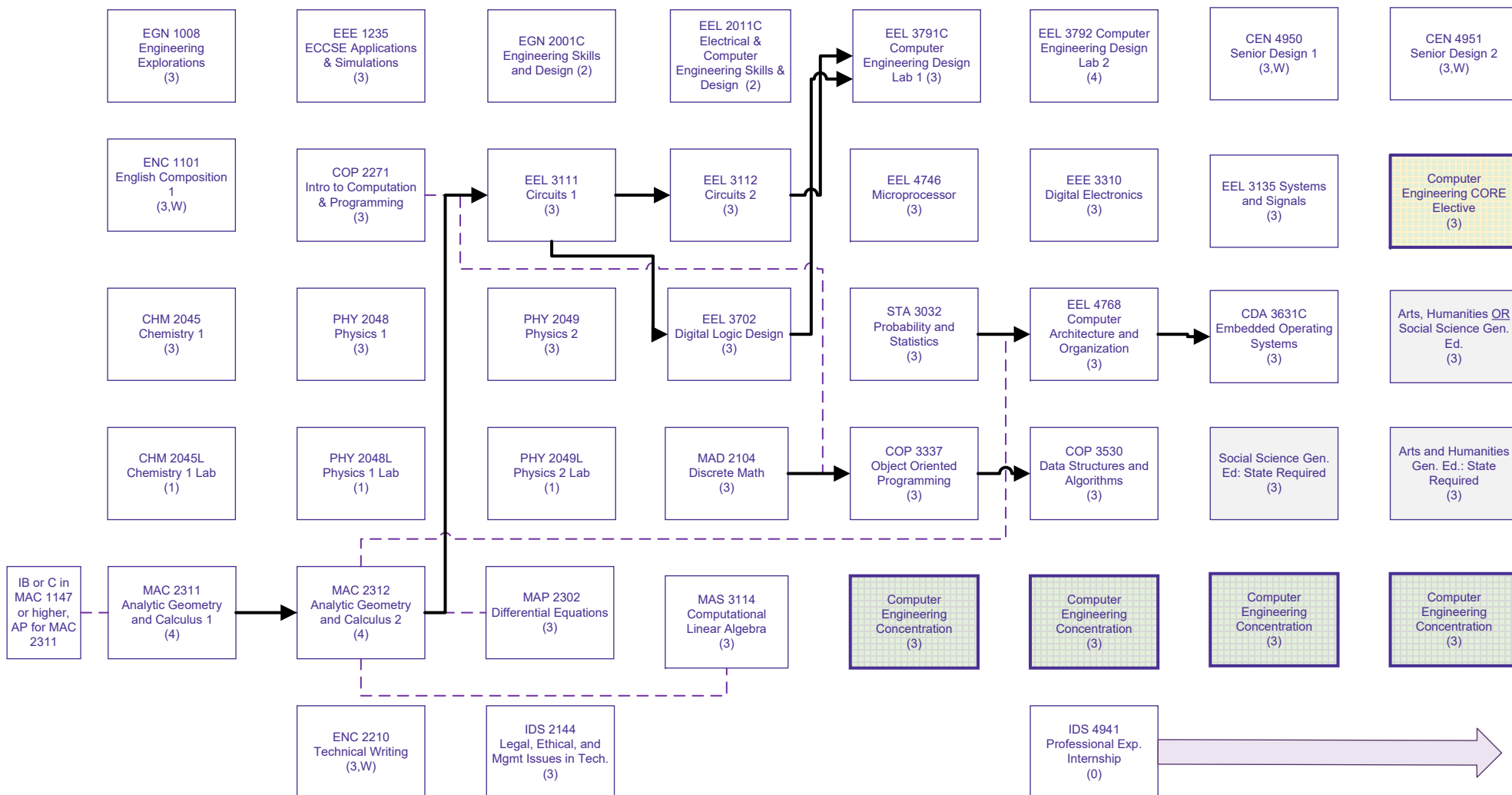
Semester 1

Semester 2

Senior Year

Semester 1

Semester 2



Legend:

Course Prefix & Number | Credits | Course Name

General Education Elective | Credits

Program or Concentration Elective | Credits

Computer Engineering CORE Elective (3)

C grade or better is required

Critical Course Pathway

BS in Computer Engineering

Program/Concentration Electives and General Education

2025-2026 Catalog

Program/Concentration Electives

Concentrations

Advanced Topics

- Complete twelve (12) credits from any computer engineering concentration, or computer engineering core elective courses.

Automotive

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

Machine Intelligence

- EEL 4759 - Digital Image Processing Credits: 3 - Does not double count as a core elective.
- EEL 4810 - Neural Networks and Applications Credits: 3
- EEL 4736 - HW/SW Co-Design Credits: 3
- CAI 4104 - Machine Learning Hardware 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 4652 - Control Theory Credits: 3
- EEL 4612 - Control System Design Credits: 3

Computer Engineering CORE Electives

Select one (1) course. Additional Courses in list count as noted in concentrations or Advanced Topics.

Computer Engineering Core Electives

CDA 4210 - VLSI Design Credits: 3

EEL 4759 - Digital Image Processing Credits: 3

EEE 4510 - Digital Signal Processing Credits: 3

Arts, Humanities, and Social Sciences

Arts and Humanities

Required, one from the following:

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

Optional, one from the following or one more from Arts and Humanities require or Social Sciences:

- IDS 2144 - Legal, Ethical, and Management Issues in Technology Credits: 3
- HUM 2022 - Explorations in the Humanities Credits: 3

Social Sciences

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

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

Optional additional course electives:

- ECO 2023 - Principles of Microeconomics Credits: 3

