

Program/Concentration Electives

Advanced Topics

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

Control Systems

- EEE 4531 Techniques for High Fidelity Signal Acq. (3, EEE 4304C/EEL 4652)
- EEL 4612 Control System Design (3, EEL 4652)
- EEL 4332 Intro to Autonomous Vehicles (3, MAP 2302, COP2271, MAS 3105 or MAS 3114)
- EEL 4220 Electronic Motor Control (3, EEL 3112C or EML 3811)

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 4312 Electric and Hybrid Vehicles (3, EEL 3112C or EML3811)
- EEL 4276 Smart-Grid and Cyber Physical Security (3, EEL3135, MAD 2104 and EEL 4251)

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 2271, (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 1007, 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 1007, STA 3032)
- EEL 4664C - Kinematics and Control of Robotic Systems (3, COP 2271, 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 3337 - Object Oriented Programming (3, COP 2271)

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)
- MUL 2010 Music Appreciation (3)

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

