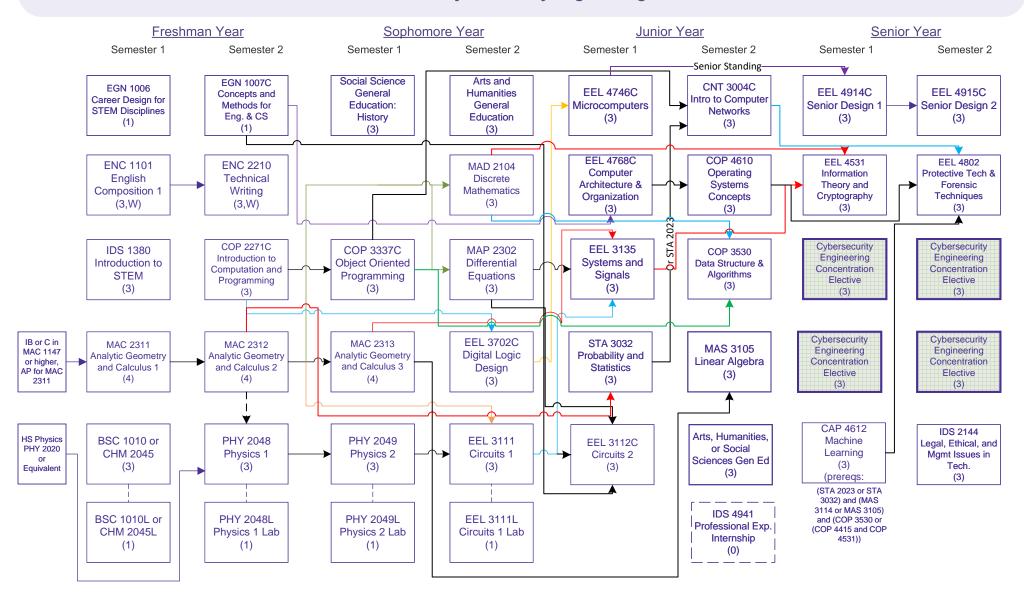
BS in Cybersecurity Engineering



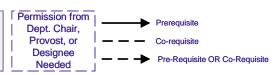


Course Number Course Name (credit, Program/ Concentration Elective

requirement met)

General
Education or
Technical
Elective

Legend:



BS in Cybersecurity Engineering Program/Concentration Electives & General Education

Program/Concentration Electives

Industrial Systems Security

- EEE 4531 Techniques for High Fidelity Acquisition (3, EEE 3351, co-req EEL 4652)
- EEL 4652 Control Theory (3, EEL 3135, EEL 3112C)
- EEL 4634 Cyber Physical Security of Industrial Control Systems (3, EEL 4652, MAD 2104, MAS 2105)
- Cybersecurity Engineering Concentration or Program Elective (3)

Smart-Grid Security

- EEL 4251 Power System Analysis (3, EEL 3112C)
- EEL 4287 Renewable Energy Systems and Power Electronics (3, EEL 3135, EEL 4251)
- EEL 4276 Smart-Grid and Cyber Physical Security (3, EEL 3135, MAD 2104, EEL 4251)
- Cybersecurity Engineering Concentration or Program Elective (3)

Hardware Security

- EEE 3310 Digital Electronics (EEL 3111, EEL 3111L, EEL 3702C, co-req EEL 3112C)
- EEL 4724 Hardware Design with FPGAs and Reconfigurable Computing (3, EEL 3702C)
- EEL 4765 Hardware Security (3, EEE 3310, EEL 4746C, EEL 4768C, co-req EEL 4724)
- Cybersecurity Engineering Concentration or Program Elective (3)

Cybersecurity Engineering Topics

- EEL 4652 Control Theory(3, EEL 3135, EEL 3112C)
- EEL 4251 Power System Analysis (3, EEL 3112C, co or pre-req MAS 3105)
- EEE 3310 Digital Electronics (3, EEL 3111, EEL 3111L, EEL 3702C, co or pre-req EEL 3112C)
- EEL 4765 Hardware Security (3, EEE 3310, EEL 4746C, EEL 4768C, co or pre-req EEL 4724)
- EEL 4634 Cyber Physical Security of Industrial Control Systems (3, EEL 4652, MAD 2104, MAS 2105)
- EEL 4276 Smart-Grid and Cyber Physical Security (3, EEL 3135, MAD 2104, EEL 4251)

Cybersecurity Engineering Electives

- CDA 3631C Embedded Operating Systems (3, CDA 3100 or EEL 4768C)
- EEL 4242 Power Electronics Circuits (3, EEE 3351 or EEE 3310)
- EEL 4515 Digital Communication Systems (3, EEL 3135 or STA 3032)
- EEL 4664C Kinematics and Control of Robotic Systems (3, COP 2271C, EEL 3111, EEL 3111L, MAP 2302, MAC 2313, STA 3032)

General Education

Arts & Humanities

Required one (1) from the following:

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

Optional:

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

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 select from the following:

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

Total Program Credits: 120

