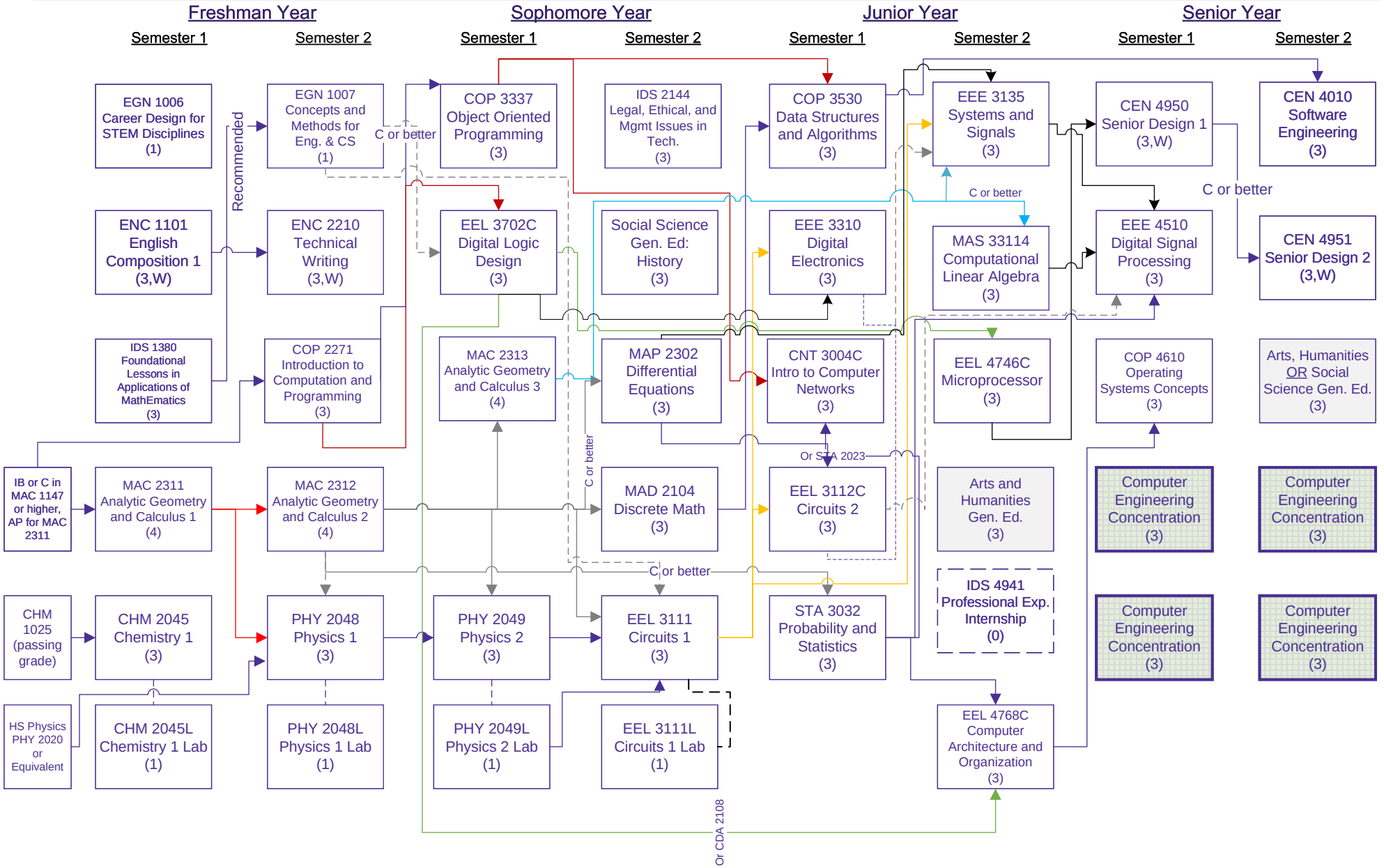
BS in Computer Engineering

2022-2023 Catalog



Legend:

Course Number Course Name (credit, requirement met)	Program/ Concentration Elective	General Education or Technical Elective	Permission from Dept. Chair, Provost, or Designee Needed

- Prerequisite
- Co-requisite
- Pre-Requisite OR Co-Requisite

FLORIDAPOLY

Last Modified 04/2022

BS in Computer Engineering
Program/Concentration Electives and General Education

Program/Concentration Electives

Advanced Topics
- 12 credits in any combination of concentration/elective courses.

Digital & Embedded System Design
- CDA 4210 - VLSI Design (3, EEL 4768C) co or pre-req EEE 3310)
- EEL 4702 – Digital Systems Design (3, EEL 3702C)
- EEL4794 – Power Aware Design (3, EEL3111, EEL3111L, CDA 420)
- CDA 3631C-Embedded Operating Systems (3, CDA 3100 or EEL 4768C)

Machine Intelligence
- **TBD**
- CAP 4613 – Applied Deep Learning (3, CAP4612, (COP3530 or COP4415, or COP4531)
- CAP 4410 - Computer Vision (3, (MAS 3114 or MAS 3105), COP 3809C, ((COP 4415 & COP 4531) or COP 3530)
- CAP 4612 - Machine Learning (3, (STA 2023 or STA 3032), (MAS 3114 or MAS 3105), (COP 3530 or (COP 4415 & COP 4531))

Autonomous Robotic Systems
- EEL 4664C - Kinematics and Control of Robotic Systems (3, COP 2271, EEL 3111, EEL 3111L, MAP 2302, MAC 2313, STA 3032)
- EEL 4660C - Autonomous Robotic Systems (3, COP 2271, COP 3337, (EEL 3702C or CDA 2108)
- EEL 4332 – Intro to Autonomous Vehicles (3, MAP2302, COP2271, (MAS3105 or MAS 3114)
- EEL 4333 – Autonomous Vehicle Design and Applications (3, EEL 4332)

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 (3, MAP 2302, COP 2271, (MAS 3105 or MAS 3114)
- EEL 4333 - Autonomous Vehicle Design and Applications (3, EEL 4332)

Computer Engineering Electives
- ENT 2112 - Entrepreneurial Opportunity Analysis (3)
- MAD 3401 - Numerical Analysis (3, MAS 3105 or MAS 3114)
- or any 3000 or 4000 level course with the following prefixes: CAP, CEN, CIS, CNT, COP (except COP 4415 and COP 4531), EEL, EEE

Arts, Humanities, and Social Sciences

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 of the following or more from Arts & Humanities required or Social Sciences:
- IDS 2144 - Legal, Ethical, and Management Issues in Technology (3-W)
- HUM 2022 Explorations in the Humanities (3-W)

Social Sciences

Required one (1) from the following:
- AMH 2020 American History Since 1877 (3-W)
- PSY 2012 General Psychology (3-W)
- ECO 2013 Principles of Macroeconomics (3-W)

Required one (1) from the following:
- AMH 2010 American History to 1877 (3-W)
- ECO 2023 Principles of Microeconomics (3-W)
- AMH 2930 Special Topics (1 to 3-W)

Total Program Credits: 120

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