

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year

Semester 1

Semester 2

Semester 1

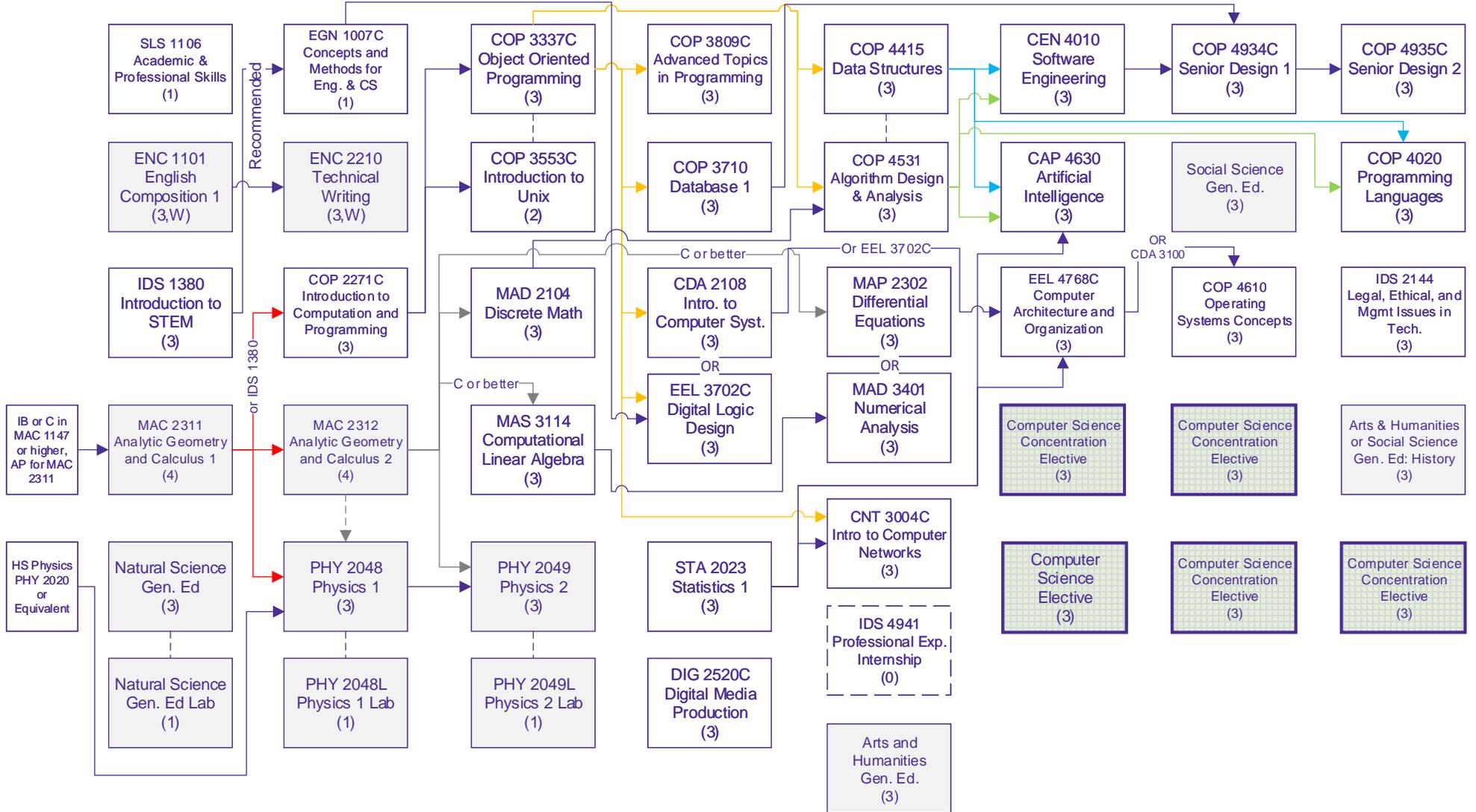
Semester 2

Semester 1

Semester 2

Semester 1

Semester 2



# BS in Computer Science

## Program/Concentration Electives & General Education

2019-2020 Catalog

### Program/Concentration Electives

#### Advanced Topics

Choose 12 credits from Big Data Analytics, Game Development & Simulation, Information Assurance & Cyber-Security, Software Engineering, Autonomous Systems, or Computer Science Electives courses.

#### Game Development & Simulation

- [CAP 4034 Computer Animation \(3, COP 4415, COP 4531\)](#)
- [CAP 4052 Game Design and Development 1 \(3, COP 4730\)](#)
- [CAP 4056 Game Design and Development 2 \(3, COP 4052\)](#)
- [CAP 4730 Computer Graphics \(3, COP 4415, COP 4531\)](#)

#### Information Assurance & Cyber - Security

- [CIS 4203 Digital Forensics \(3, CNT 3004C / CIS 4367\)](#)
- [CIS 4204 Ethical Hacking \(3, CNT 3004C / CIS 4367\)](#)
- [CIS 4362 Applied Cryptography \(3, STA 2023 OR STA 3032, COP 3530 OR COP 4415 and COP 4531\)](#)
- [CIS 4367 Computer Security \(3, CIS 4362 / COP 4610\)](#)

#### Software Engineering

- [CEN 4073 Software Requirements Engineering \(3, CEN 4010\)](#)
- [CEN 4065 Software Design and Architecture \(3, CEN 4073\)](#)
- [CEN 4070 Software Verification and Quality Assurance \(3, CEN 4073\)](#)
- [CEN 4724 User Interface and User Experience \(3, CEN 4010\)](#)

#### Big Data Analytics

- [CAP 3774 Data Warehousing \(3, COP 3710\)](#)
- [COP 3729C Database 2 \(3, COP 3710\)](#)
- [CAP 4770 Data Mining & Text Mining \(3, COP 2271C and COP 3337C and COP 3710 and QMB 3200\)](#)
- [CAP 4786 Topics in Big Data Analytics \(3, COP 3710 and MAS 3114\)](#)

#### Autonomous Systems

- [COP 4421C Autonomous Systems Programming \(3, COP 3337C\)](#)
- [CAP 4612 Machine Learning \(3, STA 2023 and MAS 3114 OR MAS 3105, COP 3530 OR COP 4415 and COP 4531\)](#)
- [CAP 4613 Applied Deep Learning \(3, COP 4415 and COP 4531\)](#)
- [CEN 4721 human Computer Interaction \(3, COP 3530, COP 4415 and COP 4531\)](#)

#### Computer Science (Program Electives)

- [COP 2034 Intro. to Programming Using Python \(3, MAC 2311\)](#)
- [COP 3834C Web Application Development \(3, COP 2271C\)](#)
- [CEN 4088 Software Security Testing \(3, CEN 4010\)](#)
- [CEN 4213 Embedded Systems Programming \(3, COP 4415, EEL 4768C\)](#)
- [CIS 4369 Web Application Security \(3, CIS 4362\)](#)
- [CNT 4409 Network Security \(3, CIS 4362, CNT 3004C\)](#)
- [CAP 4410 Computer Vision \(3, MAS 3114 OR MAS 3105, COP 3330C, COP 4415 and COP 4531 OR COP 3530\)](#)
- [COP 4520 Intro. to Parallel and Distributed Computing \(3, EEL 4768C OR CDA 3100, COP 4415, COP 4531\)](#)
- [CNT 4526 Wireless and Mobile Networking \(3, CNT 3004C, COP 4531\)](#)

### Program/Concentration Electives

#### Computer Science (Program Electives)

- [CAP 4612 Machine Learning \(3, STA 2023, MAS 3114 OR MAS 3105, COP 3530 OR COP 4415 and COP 4531\)](#)
- [COP 4620 Compilers and Interpreters \(3, COP 4415\)](#)
- [COP 4656 Mobile Device Applications \(3, COP 2272C\)](#)
- [EEL 4660C Autonomous Robotic Syst. \(3, EEL 3202C OR CDA 2108\)](#)
- [CEN 4721 Human Computer Interaction \(3, COP 4415 and COP 4531\)](#)
- [CAP 4830 Modeling and Simulation \(3, STA 2023, COP 3330C\)](#)
- [COP 4930 Special Topics \(3, CEN 4010\)](#)
- [CAP 4613 Applied Deep Learning \(3, COP 4415 and COP 4531\)](#)

### 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 \(3-W\)](#)

#### Natural Science Elective

Select four (4) credits from the following:

- [BSC 1010 Biology 1 \(3 / BSC 1010L\)](#)
- [BSC 1010 Biology 1 Lab \(1 / BSC 1010\)](#)
- [CHM 2045 Chemistry 1 \(3, MAC 1147 OR Equivalent, or passing grade in CHM 1025 / CHM 2015L\)](#)
- [CHM 2045L Chemistry 1 Lab \(1/ CHM 2045\)](#)

**Total Program Credits: 120**

[Click Here to print program planner](#)

[Click Here to view program plan of study](#)

[Click Here to access entire Florida Poly Catalog](#)

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

Last Modified 09/2019



# BS in Computer Science Advanced Topics

2019-2020 Catalog

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year

Semester 1

Semester 2

Semester 1

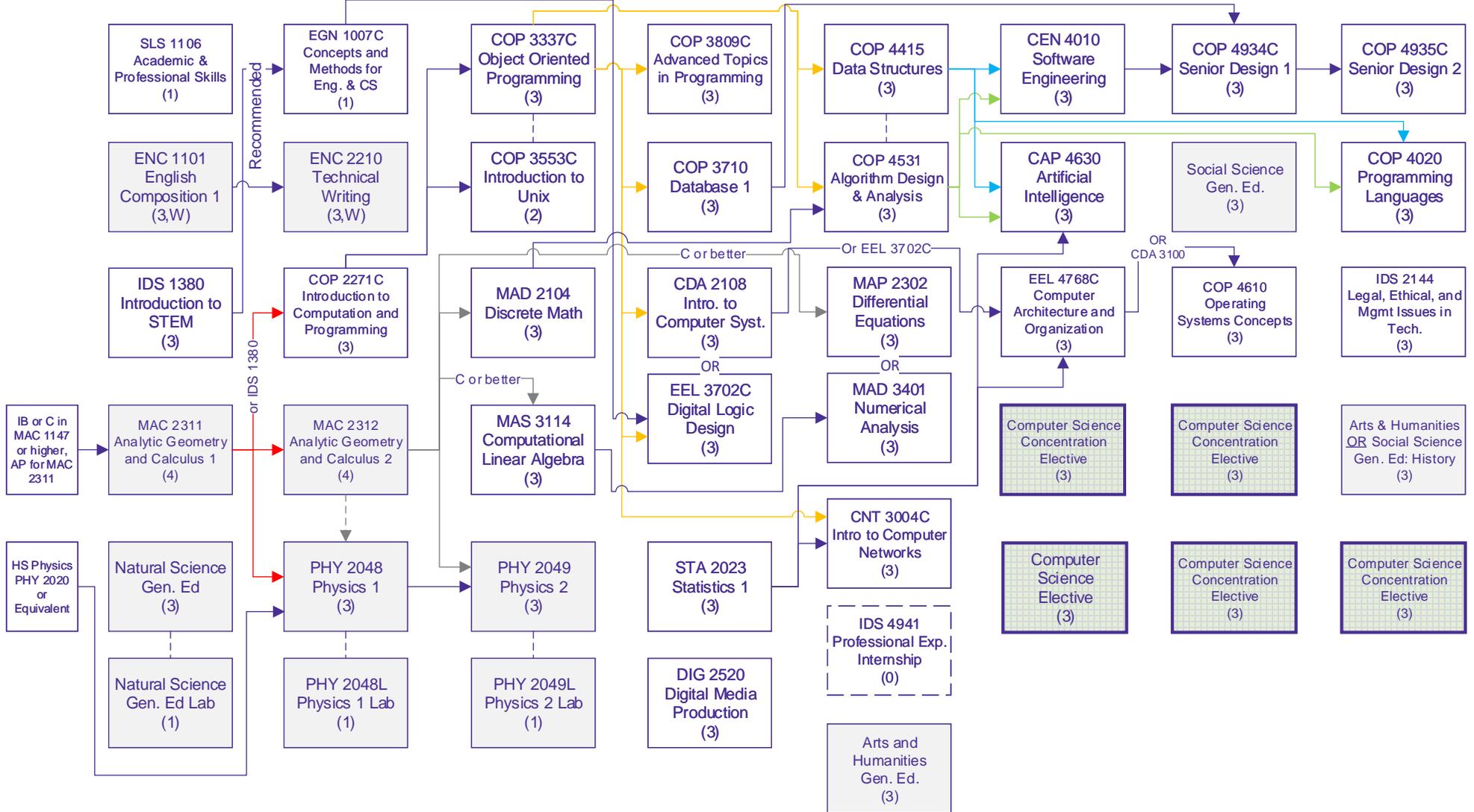
Semester 2

Semester 1

Semester 2

Semester 1

Semester 2



### Legend:



# BS in Computer Science Autonomous Systems

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year

Semester 1

Semester 2

Semester 1

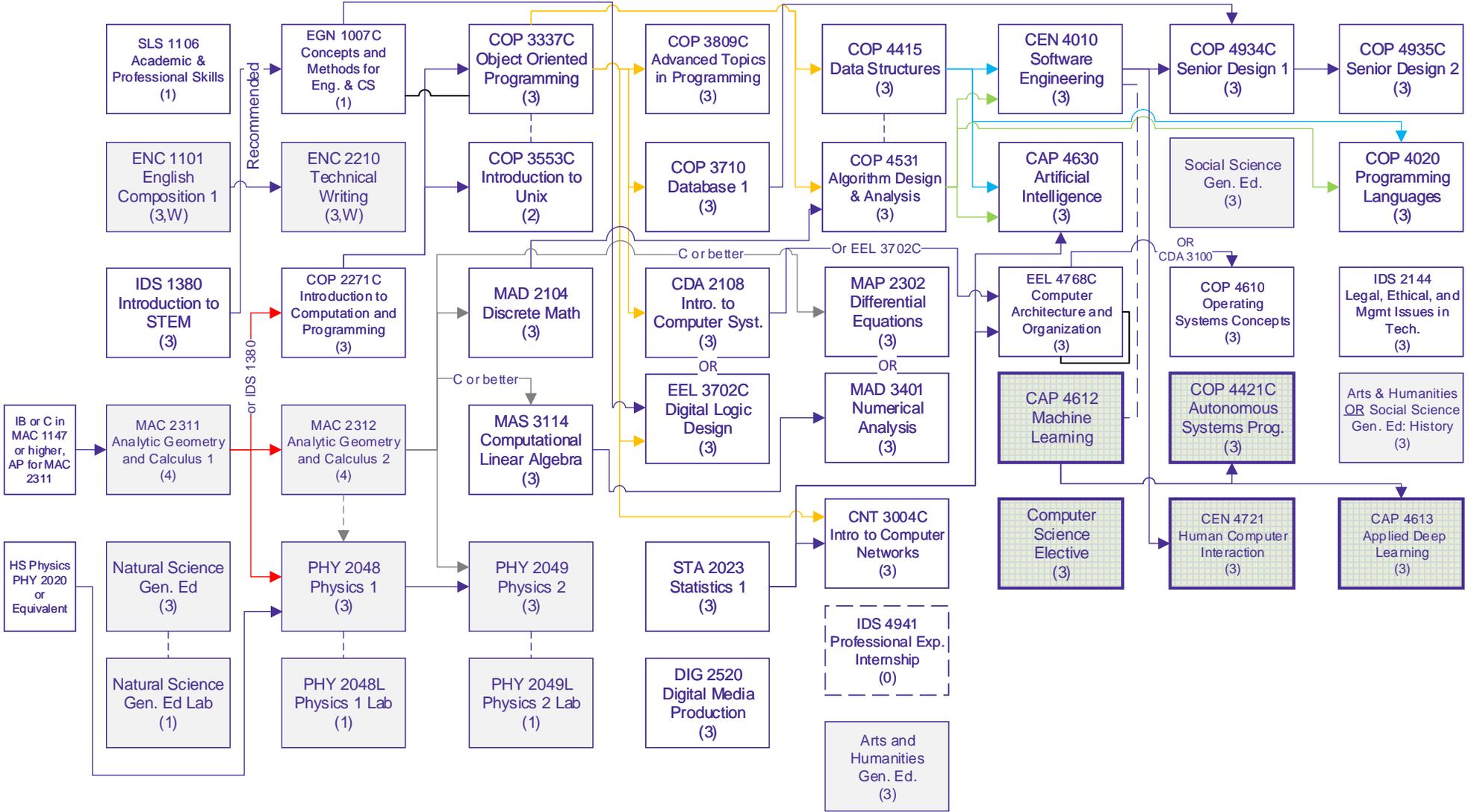
Semester 2

Semester 1

Semester 2

Semester 1

Semester 2

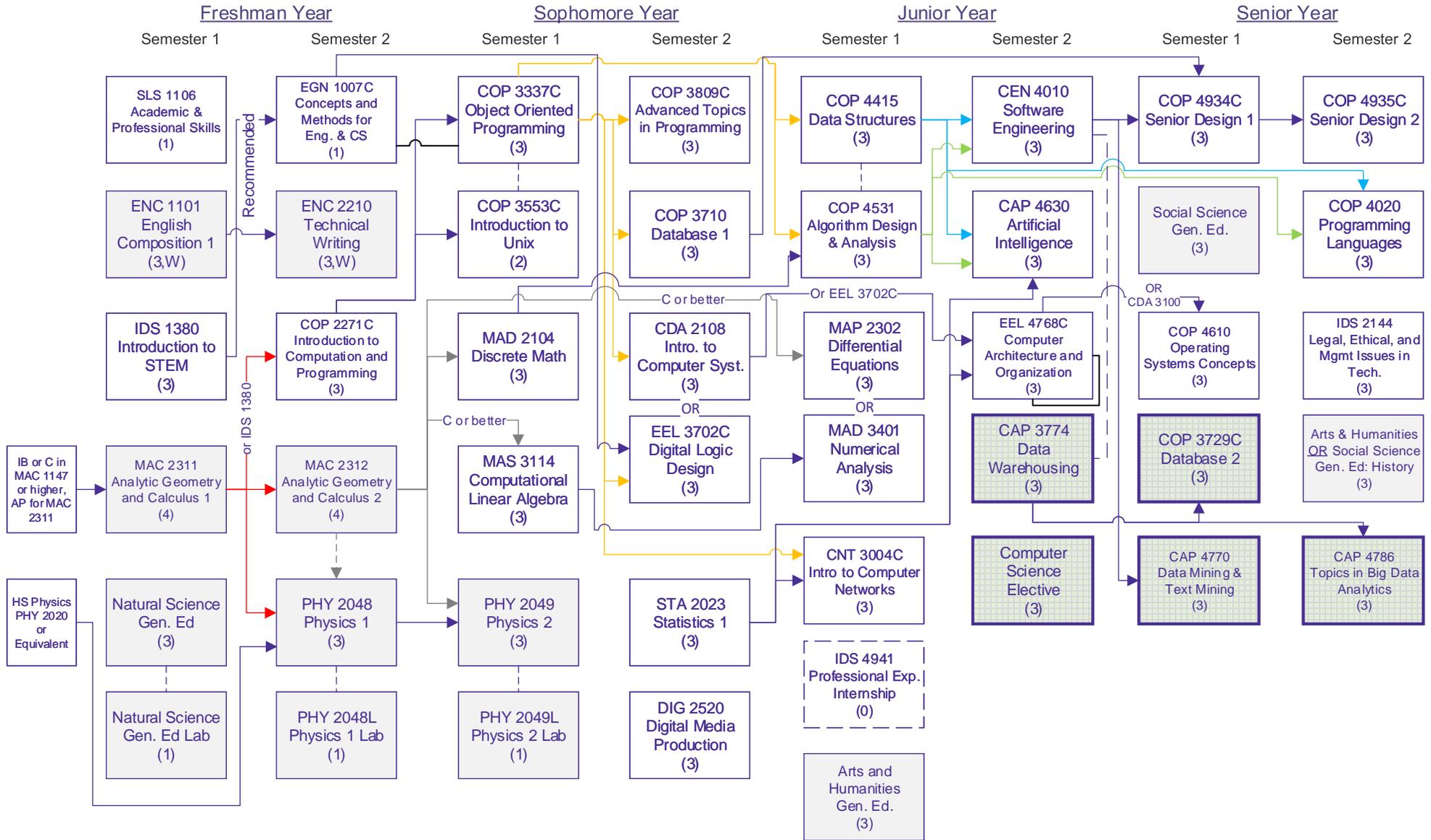


### Legend:

<b>Course Number Course Name (credit, requirement met)</b>	<b>Program/ Concentration Elective</b>	<b>General Education or Technical Elective</b>	<b>Permission from Dept. Chair, Provost, or Designee Needed</b>	Prerequisite Co-requisite Pre-Requisite OR Co-Requisite
--	--	--	---	---



# BS in Computer Science Big Data Analytics



### Legend:



# BS in Computer Science Game Development & Simulation

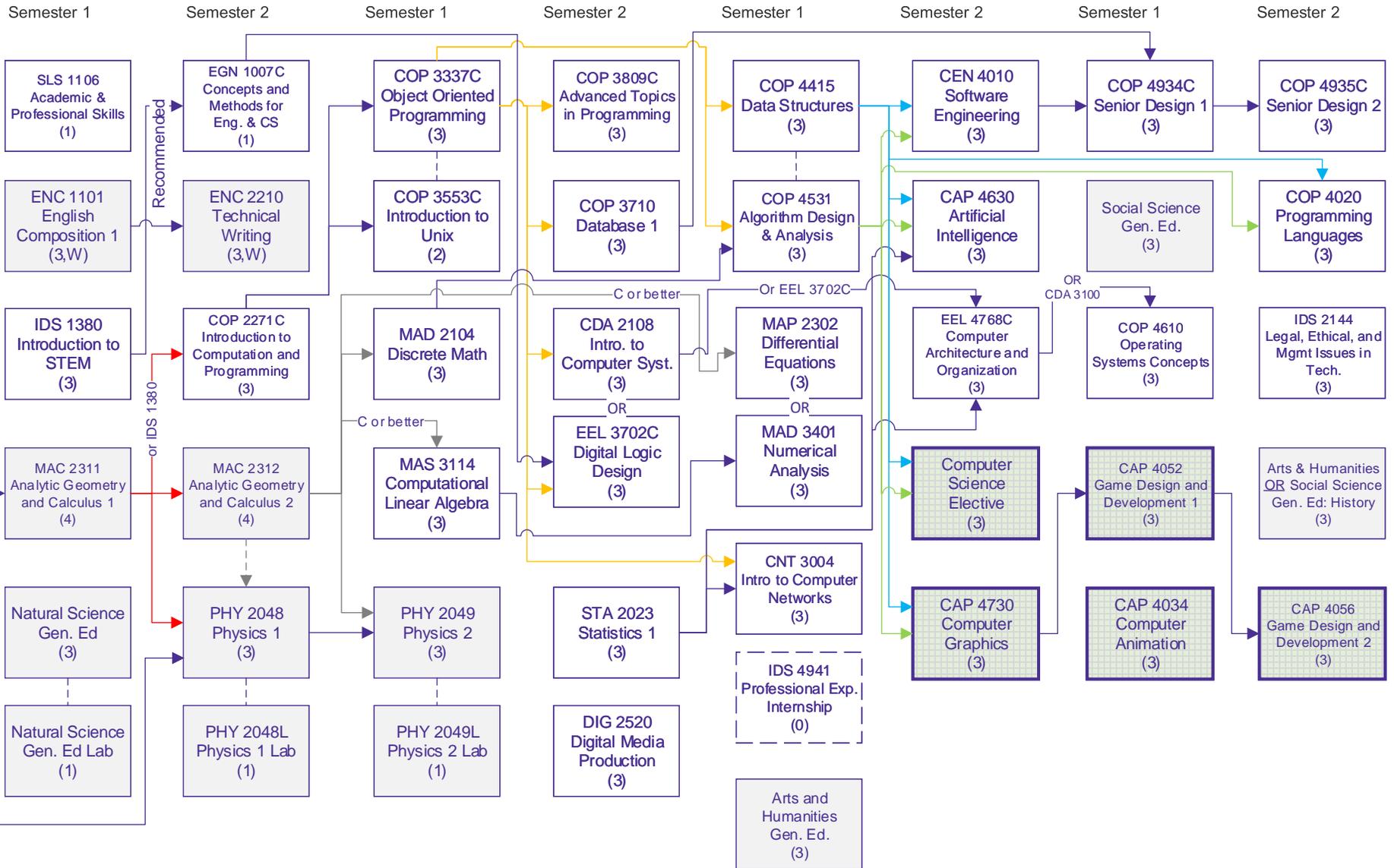
2019-2020 Catalog

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year



### Legend:



# BS in Computer Science Information Assurance & Cyber-Security

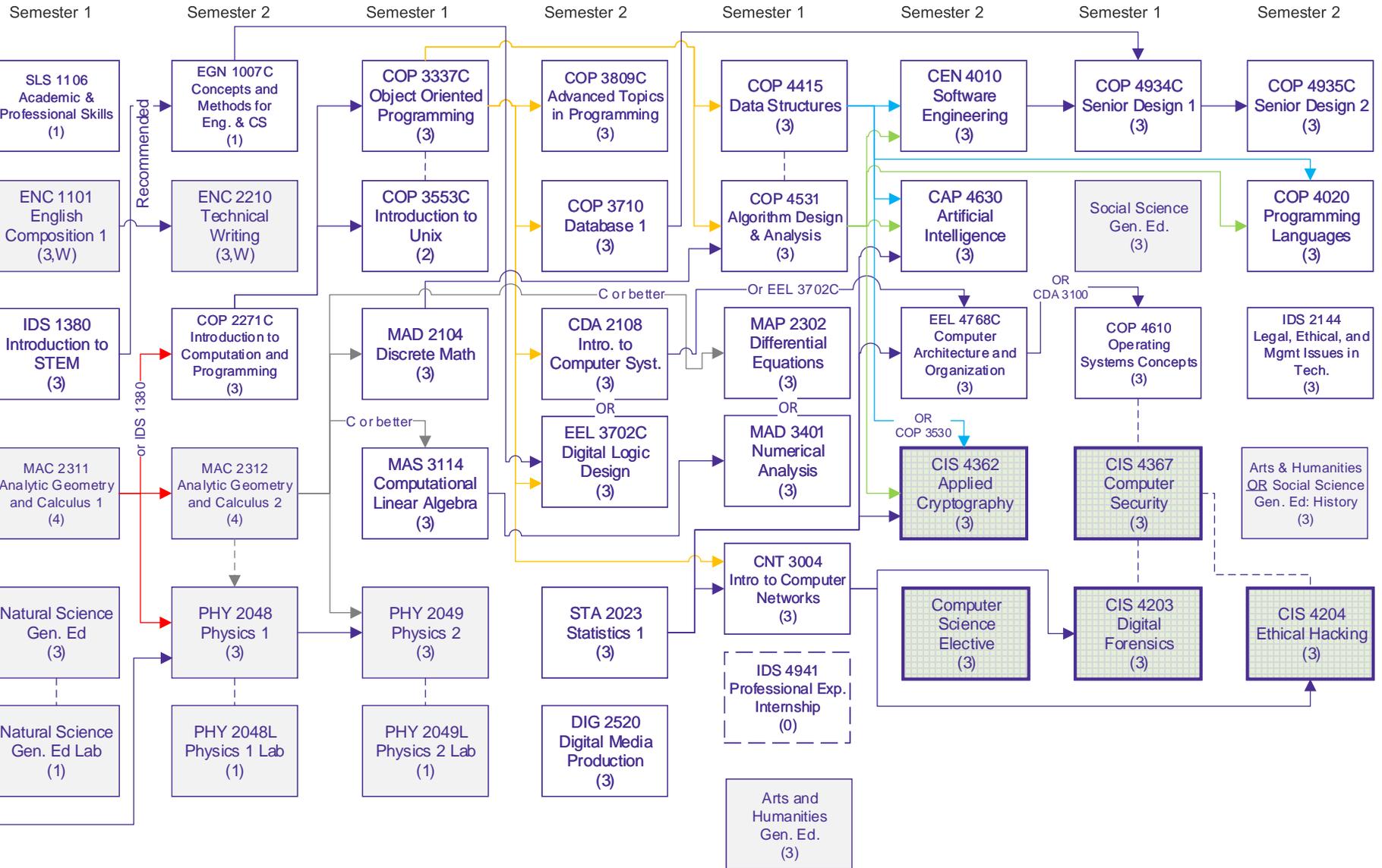
2019-2020 Catalog

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year



### Legend:



# BS in Computer Science Software Engineering

## Freshman Year

## Sophomore Year

## Junior Year

## Senior Year

Semester 1

Semester 2

Semester 1

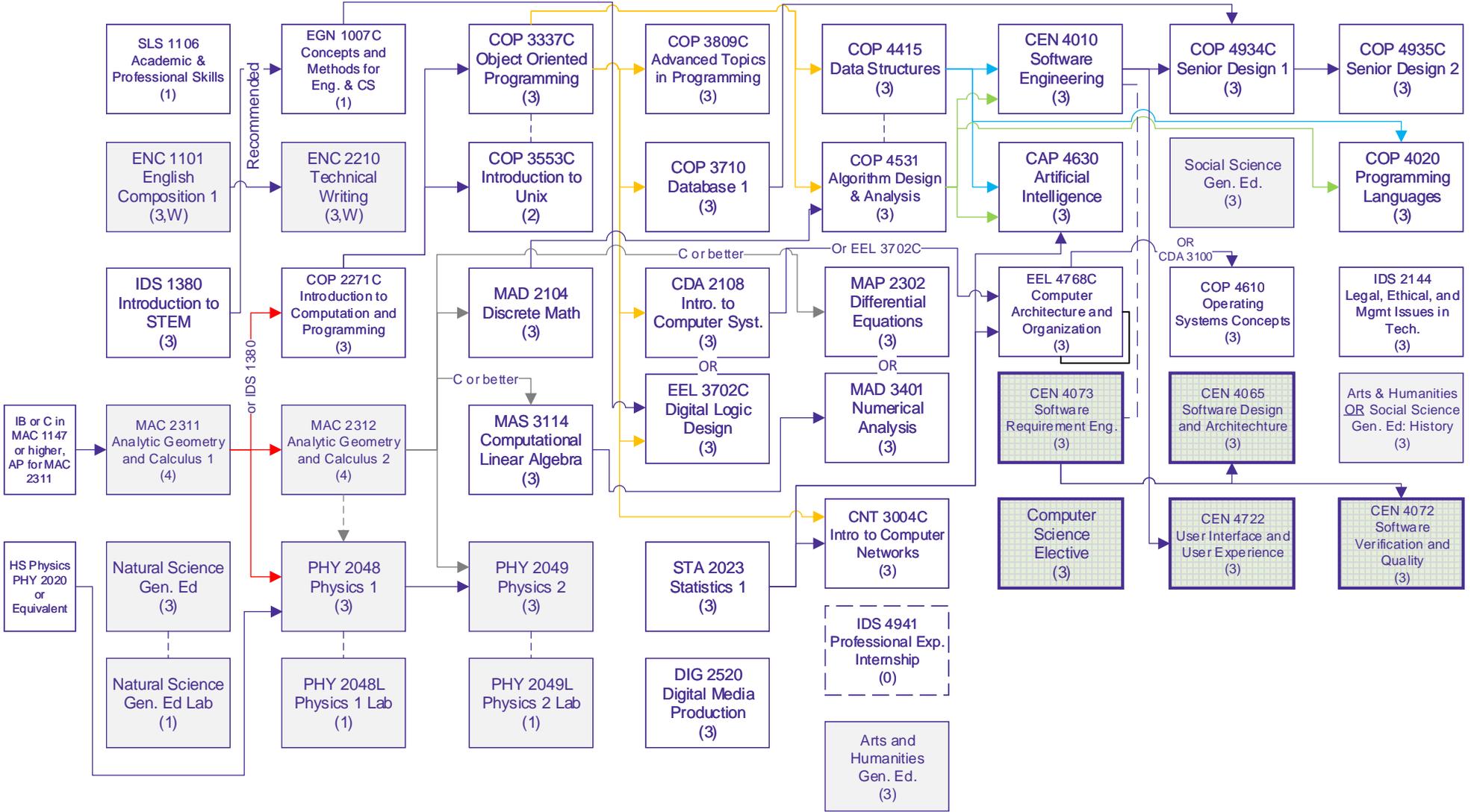
Semester 2

Semester 1

Semester 2

Semester 1

Semester 2



### Legend:

