

## Freshman Year

### Semester 1

### Semester 2

## Sophomore Year

### Semester 1

### Semester 2

## Junior Year

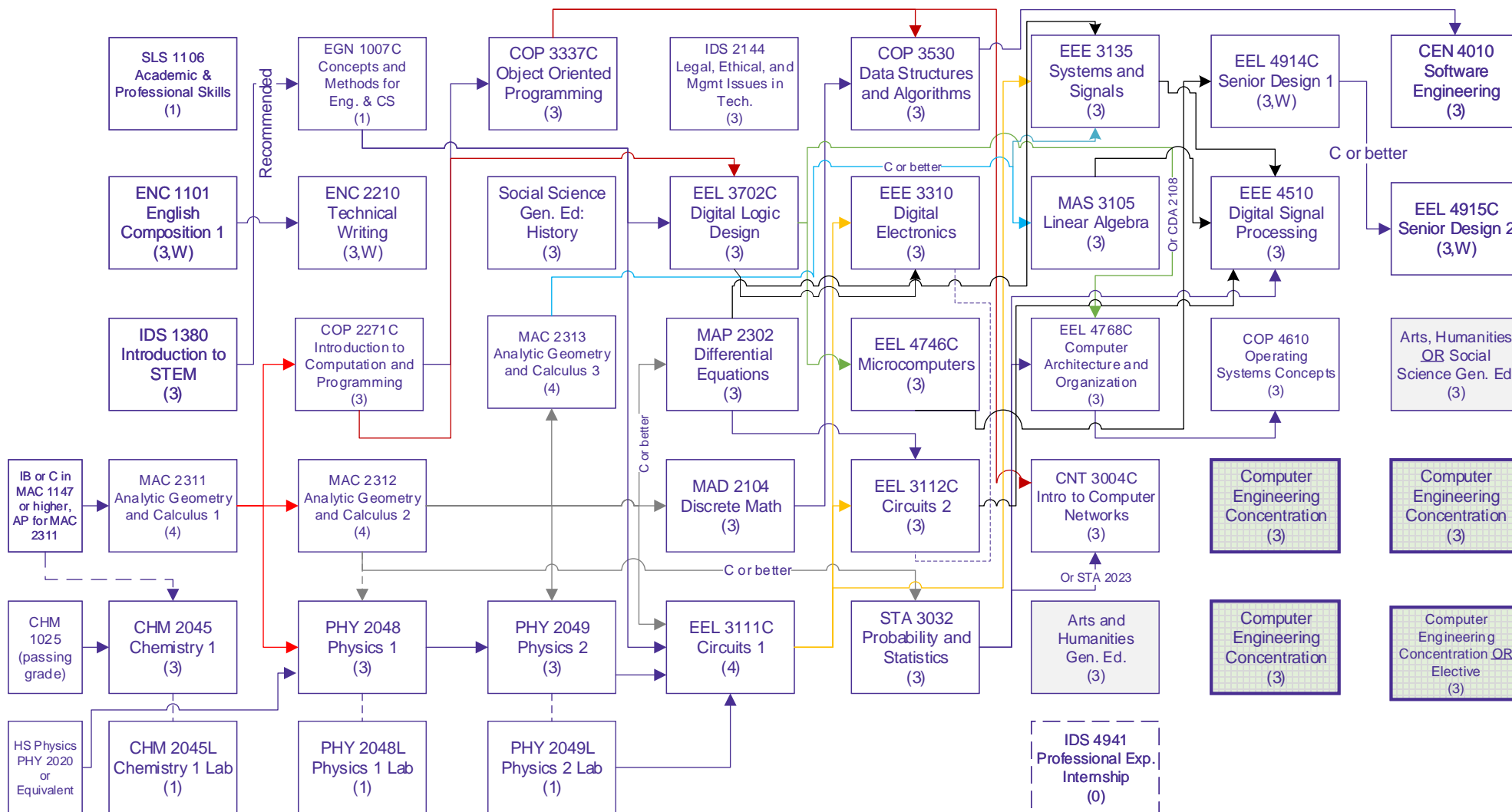
### Semester 1

### Semester 2

## Senior Year

### Semester 1

### Semester 2



## Legend:

Course 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

# BS in Computer Engineering

## Program/Concentration Electives and General Education

2019-2020 Catalog

### Program/Concentration Electives

#### Advanced Topics

Students choose nine (9) credits from courses in the CE concentrations and three (3) credits from Computer Engineering electives.

#### Digital Logic Design

- [CDA 4210 VLSI Design \(3, EEL 4768C, EEE 3310\)](#)
- [EEE 4351 Electronic Devices \(3, EEL 3112C, CHM 2045, CHM 2045L\)](#)
- [EEL 4794 Power Aware Design \(3, EEL 3111C, CDA 4210\)](#)
- [Other CE concentration or program elective \(3\)](#)

#### Embedded Systems Design

- [CDA 3631C Embedded Operating Systems \(3, EEL 4768C or CDA 3100\)](#)
- [EGN 4930D Hardware Design with FPGAs and Reconfigurable Computing \(3, EEL 3702C\)](#)
- [EEL 4685C Embedded Control \(3, EEL 3135, EEL 4768C\)](#)
- [Other CE concentration or program elective \(3\)](#)

#### Machine Intelligence

- [COP 3330C Computer Programming 2 \(3, COP 2272C\)](#)
- [CAP 4410 Computer Vision \(3, MAS 3114 or MAS 3105, COP 3330C, COP 4415 and COP 4531, or COP 3530\)](#)
- **OR**
- [EEL 4759 Digital Image Processing \(3, EEL 3135\)](#)
- [CAP 4612 Machine Learning \(3, COP 3530 or COP 4415 and COP 4531, MAS 3114 or MAS 3105, STA 2023\)](#)
- [Other CE concentration or program elective \(3\)](#)

#### Autonomous Robotic Systems

- [EEL 4664C Kinematics and Control of Robotic Systems \(3, COP 2271C - and EEL 3111C and MAP 2302 and MAC 2313 and STA 3032\)](#)
- [EEL 4660C Autonomous Robotic Systems \(3, COP 2271C and COP 3337C and \(EEL 3702C or CDA 2108\)\)](#)
- [EEL 4759 Digital Image Processing \(3, EEL 3135\)](#)
- [Other CE concentration or program elective \(3\)](#)

#### Computer Engineering (Program Electives)

- [ENT 2112 Entrepreneurial Opportunity Analysis \(3\)](#)
- [MAD 3401 Numerical Analysis \(3, MAS 3114 or MAS 3105\)](#)
- [Or any other 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 \(3-W\)](#)

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

[Click Here to print program planner](#)

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

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



# BS in Computer Engineering Advanced Topics

2019-2020 Catalog

## Freshman Year

### Semester 1

SLS 1106  
Academic &  
Professional Skills  
(1)

ENC 1101  
English  
Composition 1  
(3,W)

IDS 1380  
Introduction to  
STEM  
(3)

IB or C in  
MAC 1147  
or higher,  
AP for MAC  
2311

MAC 2311  
Analytic Geometry  
and Calculus 1  
(4)

CHM  
1025  
(passing  
grade)

CHM 2045  
Chemistry 1  
(3)

HS Physics  
PHY 2020  
or  
Equivalent

CHM 2045L  
Chemistry 1 Lab  
(1)

### Semester 2

EGN 1007C  
Concepts and  
Methods for  
Eng. & CS  
(1)

ENC 2210  
Technical  
Writing  
(3,W)

COP 2271C  
Introduction to  
Computation and  
Programming  
(3)

MAC 2312  
Analytic Geometry  
and Calculus 2  
(4)

PHY 2048  
Physics 1  
(3)

PHY 2048L  
Physics 1 Lab  
(1)

## Sophomore Year

### Semester 1

COP 3337C  
Object Oriented  
Programming  
(3)

Social Science  
Gen. Ed:  
History  
(3)

MAC 2313  
Analytic Geometry  
and Calculus 3  
(4)

PHY 2049  
Physics 2  
(3)

PHY 2049L  
Physics 2 Lab  
(1)

### Semester 2

IDS 2144  
Legal, Ethical, and  
Mgmt Issues in  
Tech.  
(3)

EEL 3702C  
Digital Logic  
Design  
(3)

MAP 2302  
Differential  
Equations  
(3)

MAD 2104  
Discrete Math  
(3)

EEL 3111C  
Circuits 1  
(4)

## Junior Year

### Semester 1

COP 3530  
Data Structures  
and Algorithms  
(3)

EEE 3310  
Digital  
Electronics  
(3)

EEL 4746C  
Microcomputers  
(3)

EEL 3112C  
Circuits 2  
(3)

STA 3032  
Probability and  
Statistics  
(3)

### Semester 2

EEE 3135  
Systems and  
Signals  
(3)

MAS 3105  
Linear Algebra  
(3)

EEL 4768C  
Computer  
Architecture and  
Organization  
(3)

CNT 3004C  
Intro to Computer  
Networks  
(3)

Arts and  
Humanities  
Gen. Ed.  
(3)

## Senior Year

### Semester 1

EEL 4914C  
Senior Design 1  
(3,W)

EEE 4510  
Digital Signal  
Processing  
(3)

COP 4610  
Operating  
Systems Concepts  
(3)

Computer  
Engineering  
Concentration  
(3)

Computer  
Engineering  
Concentration  
(3)

### Semester 2

CEN 4010  
Software  
Engineering  
(3)

EEL 4915C  
Senior Design 2  
(3,W)

Arts, Humanities  
OR Social  
Science Gen. Ed.  
(3)

Computer  
Engineering  
Concentration  
(3)

Computer  
Engineering  
Concentration OR  
Elective  
(3)

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FLORIDAPOLY

Last Modified 09/2019

# BS in Computer Engineering Autonomous Robotic Systems

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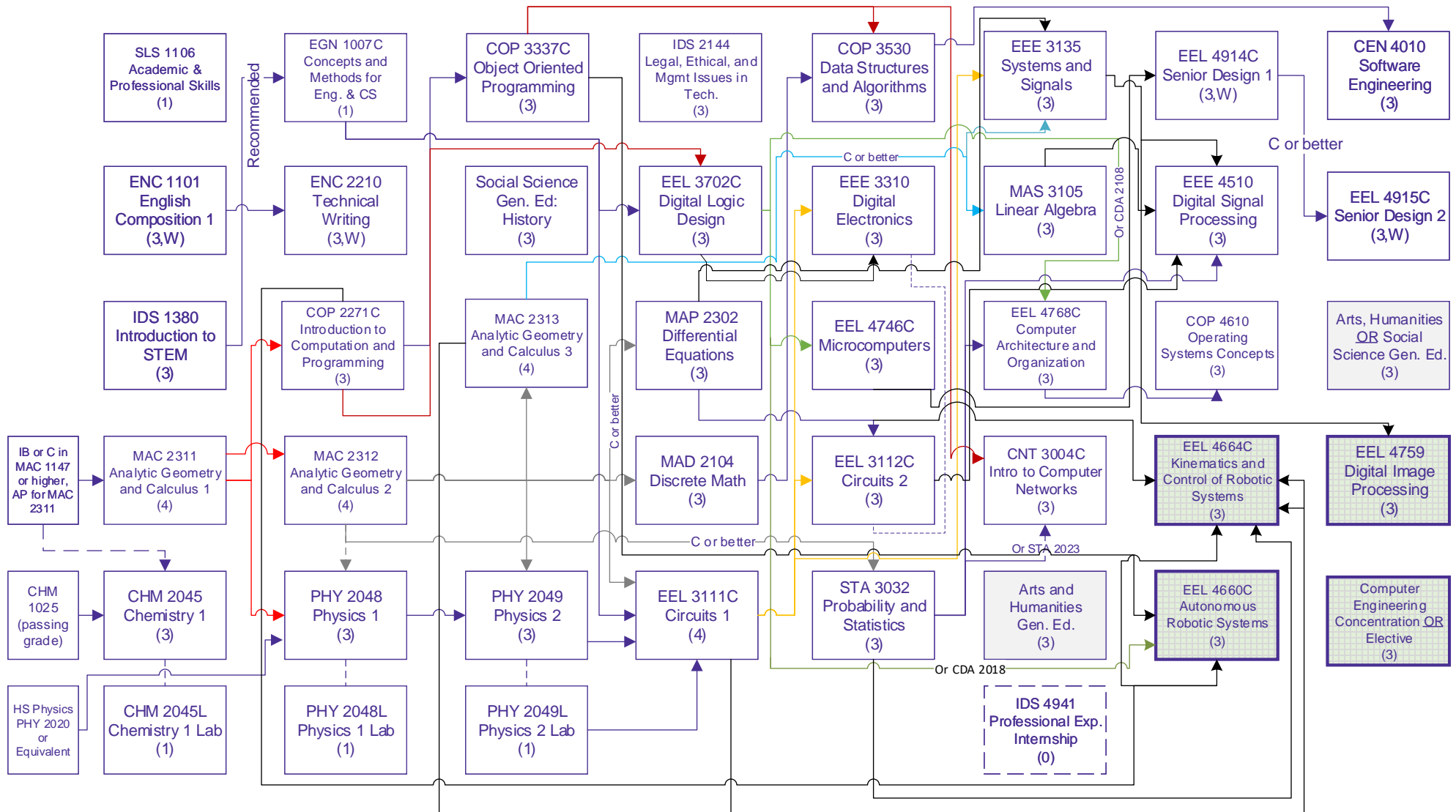
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### Semester 2

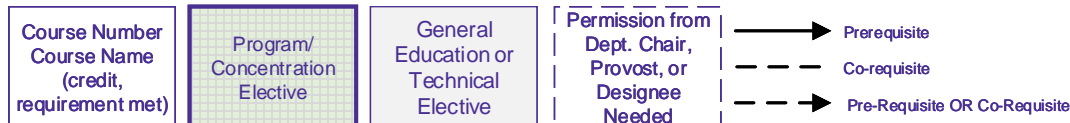
## Senior Year

### Semester 1

### Semester 2



## Legend:



# BS in Computer Engineering

## Digital Logic Design

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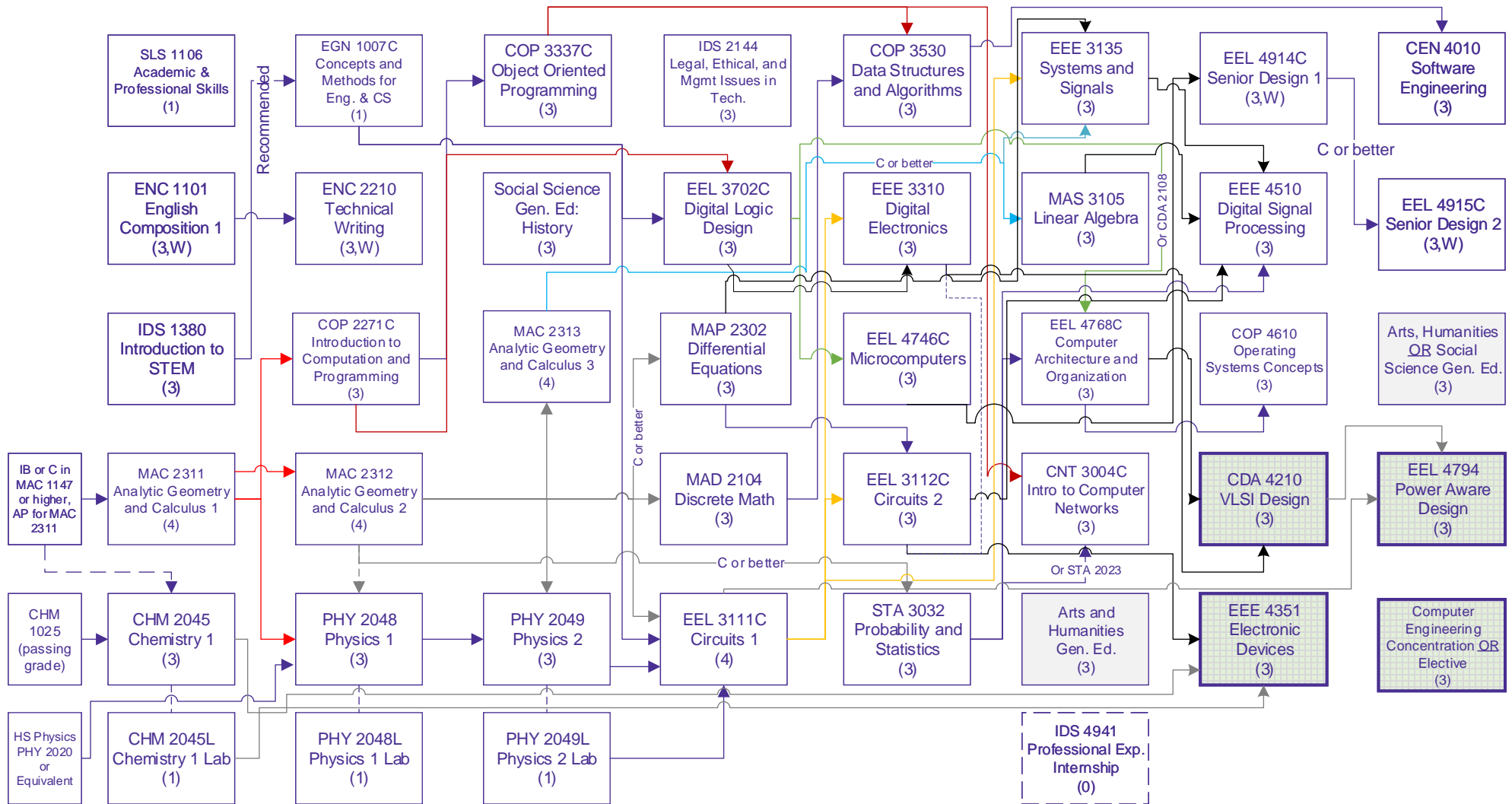
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#### Semester 2

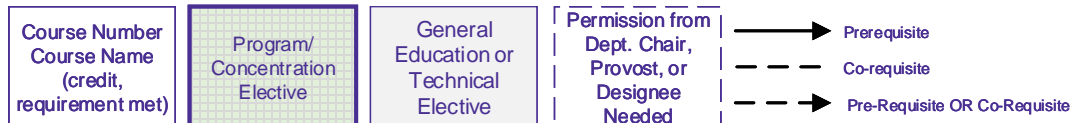
### Senior Year

#### Semester 1

#### Semester 2



### Legend:



# BS in Computer Engineering Embedded System Design

2019-2020 Catalog

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## Junior Year

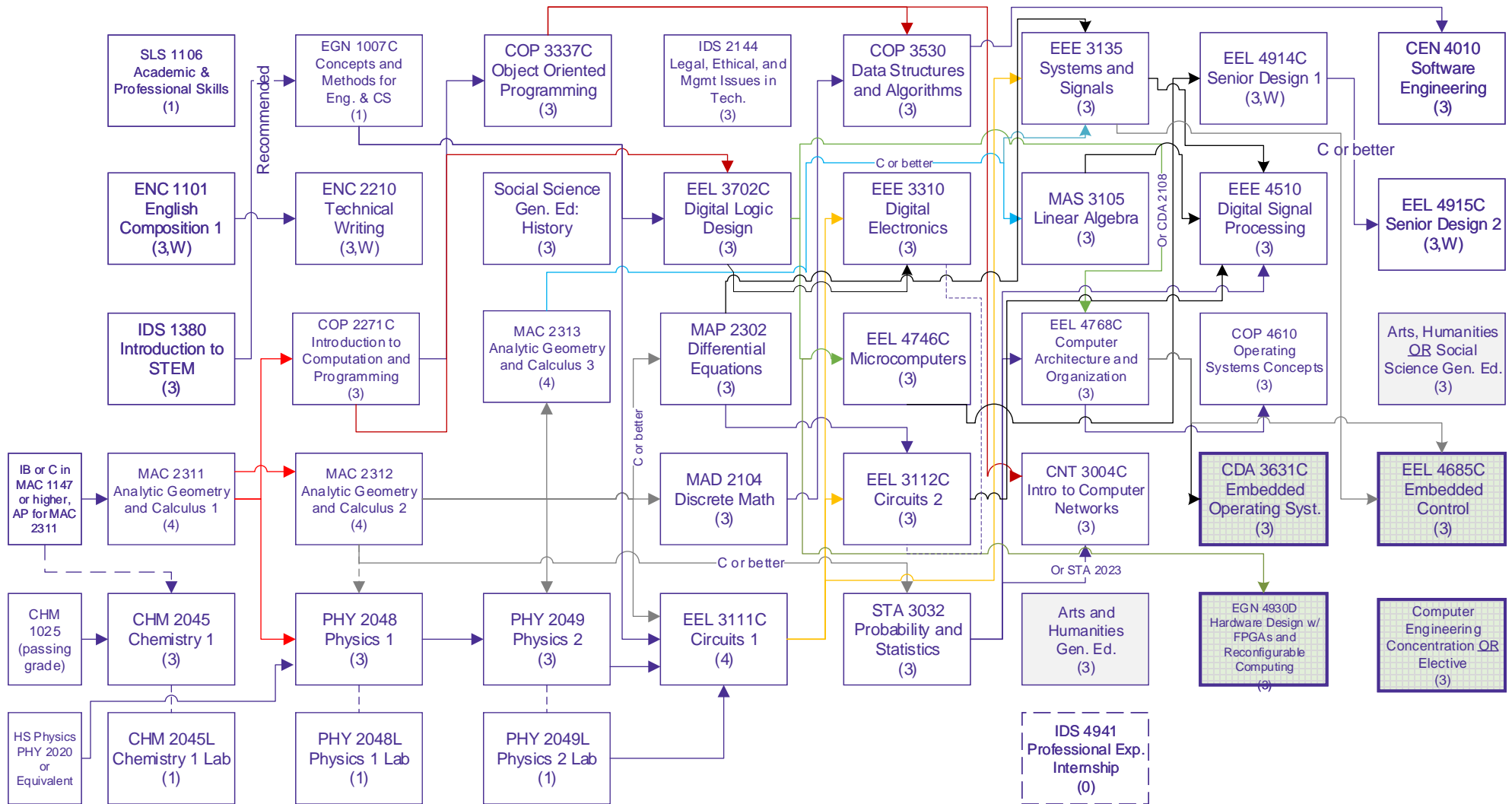
### Semester 1

### Semester 2

## Senior Year

### Semester 1

### Semester 2



## Legend:



# BS in Computer Engineering Machine Intelligence

2019-2020 Catalog

## Freshman Year

### Semester 1

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### Semester 1

### Semester 2

## Junior Year

### Semester 1

### Semester 2

## Senior Year

### Semester 1

### Semester 2

