

# Photonic Science & Engineering 2020-2021

## Major Courses Flowchart\*

www.creol.ucf.edu  
undergrad@creol.ucf.edu

### Major Acceptance Requirements (C or better in these courses)

GHM 2045C\*\*  
Chem Fundamentals I (4)  
PR: Chem Placement Test

Or

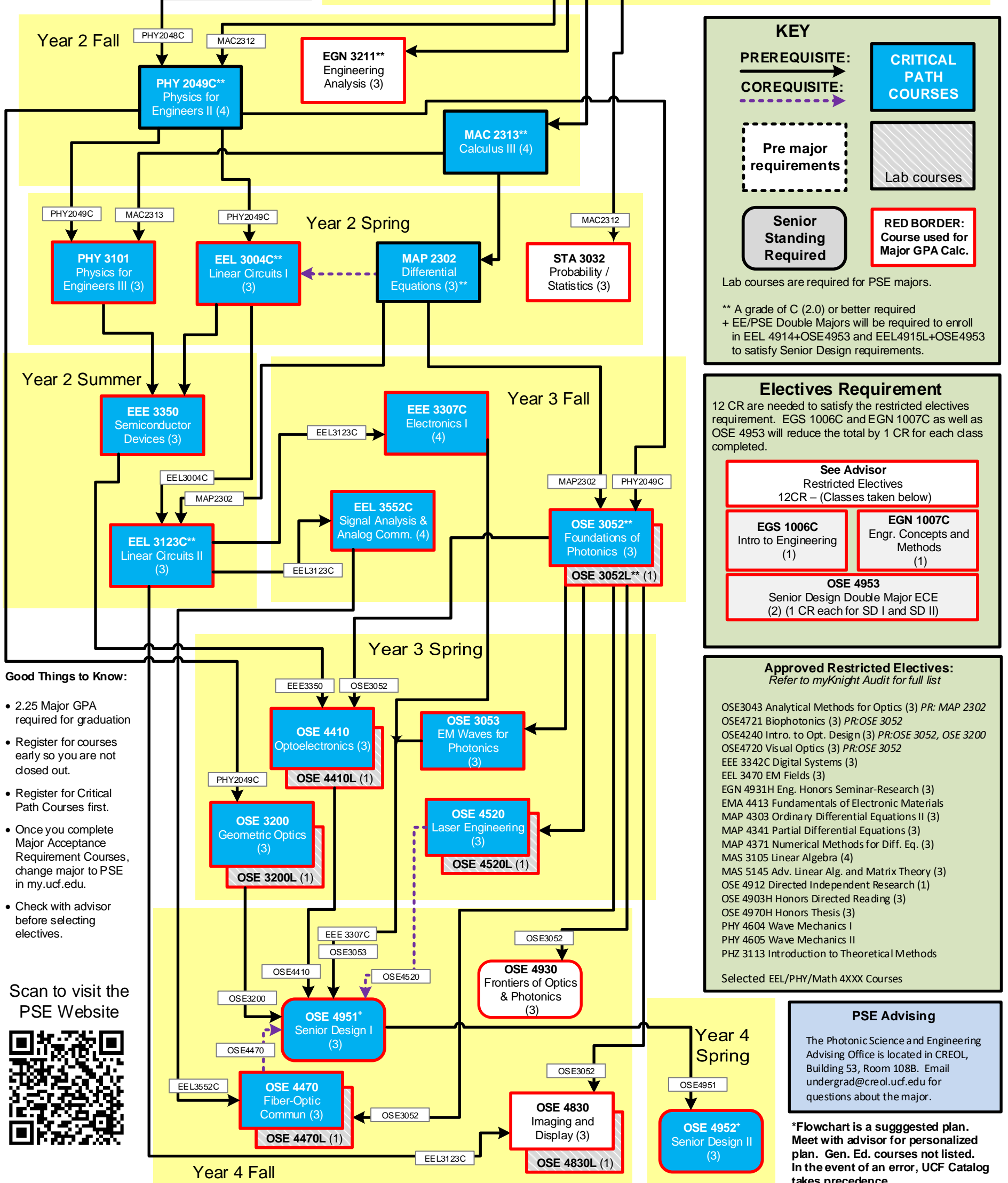
CHS 1440\*\*  
Principles of Chemistry (4)  
PR: 1 Yr HS Chemistry

MAC 2311C\*\*  
Calculus I (4)

MAC1140C & MAC1114  
C or better  
or appropriate score on  
math placement exam

MAC 2312\*\*  
Calculus II (4)

PHY 2048C\*\*  
Physics for  
Engineers I (4)



### KEY

PREREQUISITE: →

COREQUISITE: - - - - - →

Pre major  
requirements

CRITICAL  
PATH  
COURSES

Lab courses

Senior  
Standing  
Required

RED BORDER:  
Course used for  
Major GPA Calc.

Lab courses are required for PSE majors.

\*\* A grade of C (2.0) or better required  
+ EE/PSE Double Majors will be required to enroll  
in EEL 4914+OSE4953 and EEL4915L+OSE4953  
to satisfy Senior Design requirements.

### Electives Requirement

12 CR are needed to satisfy the restricted electives  
requirement. EGS 1006C and EGN 1007C as well as  
OSE 4953 will reduce the total by 1 CR for each class  
completed.

#### See Advisor

Restricted Electives  
12CR – (Classes taken below)

EGS 1006C  
Intro to Engineering  
(1)

EGN 1007C  
Engr. Concepts and  
Methods  
(1)

#### OSE 4953

Senior Design Double Major ECE  
(2) (1 CR each for SD I and SD II)

### Good Things to Know:

- 2.25 Major GPA required for graduation
- Register for courses early so you are not closed out.
- Register for Critical Path Courses first.
- Once you complete Major Acceptance Requirement Courses, change major to PSE in my.ucf.edu.
- Check with advisor before selecting electives.

Scan to visit the  
PSE Website



### Approved Restricted Electives: Refer to myKnight Audit for full list

OSE3043 Analytical Methods for Optics (3) PR: MAP 2302  
OSE4721 Biophotonics (3) PR: OSE 3052  
OSE4240 Intro. to Opt. Design (3) PR: OSE 3052, OSE 3200  
OSE4720 Visual Optics (3) PR: OSE 3052  
EEE 3342C Digital Systems (3)  
EEL 3470 EM Fields (3)  
EGN 4931H Eng. Honors Seminar-Research (3)  
EMA 4413 Fundamentals of Electronic Materials  
MAP 4303 Ordinary Differential Equations II (3)  
MAP 4341 Partial Differential Equations (3)  
MAP 4371 Numerical Methods for Diff. Eq. (3)  
MAS 3105 Linear Algebra (4)  
MAS 5145 Adv. Linear Alg. and Matrix Theory (3)  
OSE 4912 Directed Independent Research (1)  
OSE 4903H Honors Directed Reading (3)  
OSE 4970H Honors Thesis (3)  
PHY 4604 Wave Mechanics I  
PHY 4605 Wave Mechanics II  
PHZ 3113 Introduction to Theoretical Methods

Selected EEL/PHY/Math 4XXX Courses

### PSE Advising

The Photonic Science and Engineering  
Advising Office is located in CREOL,  
Building 53, Room 108B. Email  
undergrad@creol.ucf.edu for  
questions about the major.

\*Flowchart is a suggested plan.  
Meet with advisor for personalized  
plan. Gen. Ed. courses not listed.  
In the event of an error, UCF Catalog  
takes precedence.