

Photonic Science & Engineering 2019-2020

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)

Year 2 Fall

PHY2048C

MAC2312

PHY 2049C**
Physics for
Engineers II (4)

EGN 3211**
Engineering
Analysis (3)

MAC 2313**
Calculus III (4)

PHY2049C

PHY2049C

MAC2313

PHY2049C

Year 2 Spring

OSE 3200
Geometric Optics
(3)

OSE 3200L (1)

PHY 3101
Physics for
Engineers III (3)

EEL 3004C**
Linear
Circuits I (3)

MAP 2302
Differential
Equations (3)**

Year 2 Summer

STA 3032
Probability /
Statistics (3)

EEE 3350
Semiconductor
Devices (3)

Year 3 Fall

EEE 3307C
Electronics I
(4)

EEL 3123C**
Linear
Circuits II (3)

EEL 3552C
Signal Analysis &
Analog Comm. (4)

OSE 3052
Foundations of
Photonics (3)

OSE 3052L (1)

Year 3 Spring

OSE 4410
Optoelectronics (3)

OSE 4410L (1)

OSE 3053
EM Waves for
Photonics (3)

OSE 4520
Laser Engineering
(3)

OSE 4520L (1)

Year 4 Fall

OSE 4951*
Senior Design I
(3)

OSE 4930
Frontiers of Optics
& Photonics
(3)

OSE 4470
Fiber-Optic
Commun (3)

OSE 4470L (1)

OSE 4830
Imaging and
Display (3)

OSE 4830L (1)

Year 4
Spring

OSE 4952*
Senior Design II
(3)

KEY

PREREQUISITE:

COREQUISITE:

Pre major
requirements

Senior
Standing
Required

**CRITICAL
PATH
COURSES**

Lab courses

**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)

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 Introduction to Optical Design (3) PR: OSE 3052
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.

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

