

Photonic Science & Engineering 2018-2019

Major Courses Flowchart*
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Major Acceptance Requirements (C or better in these courses)

CHM 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

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

MAC 2312**
Calculus II (4)

Year 2 Fall

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

EGN 3211**
Engineering
Analysis (3)

MAC 2313**
Calculus III (4)

Year 2 Spring

PHY 3101
Physics for
Engineers III (3)

EEL 3004C**
Electrical
Networks (3)

MAP 2302
Differential
Equations (3)**

Year 2 Summer

STA 3032
Probability /
Statistics (3)

EEE 3350
Semiconductor
Devices 1 (3)

Year 3 Fall

EEL 3123C**
Networks &
Systems (3)

EEE 3307C
Electronics I
(4)

OSE 3200
Geometric Optics
(3)

OSE 3200L (1)

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

OSE 3052
Foundations of
Photonics (3)

OSE 3052L (1)

Year 3 Spring

OSE 4410
Optoelectronics (3)

OSE 4520
Laser Engineering
(3)

OSE 3053
EM Waves for
Photonics (3)

Year 4 Fall

OSE 4951
Senior Design I
(3)

OSE 4930
Frontiers of Optics
& Photonics
(3)

OSE 4470
Fiber-Optic
Commun (3)

OSE 4830
Imaging and
Display (3)

Year 4 Spring

OSE 4952
Senior Design II
(3)

KEY

PREREQUISITE: (solid arrow)
COREQUISITE: (dashed arrow)

CRITICAL PATH COURSES: (blue box)
Pre major requirements: (dashed box)
Senior Standing Required: (grey box)
RED BORDER: Course used for Major GPA Calc.: (red border)

Lab courses are required for PSE majors.
** A grade of C (2.0) or better required.

Electives Requirement

A total of 14 CR are needed to satisfy the restricted electives requirement. If EGS 1006C and EGN 1007C are completed, these two courses count toward the elective requirement.

EGS 1006C Intro to Engineering (1)
+
EGN 1007C Engr. Concepts and Methods (1)
+
See Advisor Restricted Electives (10) = See Advisor Restricted Electives (12)

Approved Restricted Electives:

Refer to myKnight Audit for full list

- OSE3043 Analytical Methods for Optics (3)
- OSE4721 Biophotonics (3)
- OSE4240 Optics & Photonics Design (3)
- OSE4720 Visual Optics (3)
- 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 4900 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.

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



*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.