

## Student Information

Name: \_\_\_\_\_ OSU Email: \_\_\_\_\_

## Suggested Curriculum

This should be used as a **guide** only. Semester offerings are subject to change.

Year	Autumn	Spring
1	___ PHYSICS 1250 ( <i>Mechanics, Thermal, Waves</i> ) ..... 5 hr ___ MATH 1151 ( <i>Calculus I</i> ) ..... 5 hr ___ ENGR 1181 ( <i>Fundamentals of Engr 1</i> ) ..... 2 hr ___ ENGR 1100 ( <i>Engineering Survey</i> ) ..... 1 hr ___ General Education ..... 3 hr	___ PHYSICS 1251 ( <i>E&amp;M, Optics, Modern Phys</i> )..... 5 hr ___ MATH 1172 ( <i>Eng Mathematics A</i> )..... 5 hr ___ ENGR 1182 ( <i>Fundamentals of Engr 2</i> )..... 2 hr ___ ENGR/CSE 1222 <sup>(1)</sup> ( <i>C++ Programming</i> )..... 3 hr ___ General Education ..... 3 hr
2	___ <b>PHYSICS 2300</b> ( <i>Mechanics 1</i> )..... 4 hr ___ <b>PHYSICS 2095</b> ( <i>Physics Seminar</i> )..... 1 hr ___ <b>PHYSICS 3700</b> ( <i>Data Analysis Lab</i> )..... 3 hr ___ MATH 2173 ( <i>Engineering Math B</i> )..... 3 hr ___ Engineering Elective..... 3 hr ___ General Education..... 3 hr	___ <b>PHYSICS 2301</b> ( <i>Mechanics 2</i> )..... 4 hr ___ General Education..... 3 hr ___ MATH 2174 ( <i>Lin Alg &amp; Diff Eq</i> )..... 3 hr ___ Engineering Elective..... 3 hr ___ General Education..... 3 hr
3	___ <b>PHYSICS 5500</b> ( <i>Quantum Mechanics</i> )..... 4 hr ___ Engineering Elective..... 3 hr ___ Engineering Elective..... 3 hr ___ Engineering Elective..... 3 hr ___ General Education..... 3 hr	___ <b>PHYSICS 5400</b> ( <i>Electromagnetism</i> )..... 4 hr ___ <b>PHYSICS 4700</b> ( <i>Electronics Lab</i> )..... 3 hr ___ Engineering Elective..... 3 hr ___ Targeted Elective..... 3 hr ___ General Education..... 3 hr
4	___ <b>PHYSICS 5800</b> ( <i>Eng Phy Capstone 1</i> )..... 3 hr ___ Engineering Elective..... 3 hr ___ Engineering Elective..... 3 hr ___ Targeted Elective..... 3 hr ___ General Education..... 3 hr	___ <b>PHYSICS 5801</b> ( <i>Eng Phy Capstone 2</i> )..... 3 hr ___ <b>PHYSICS 5710</b> ( <i>Advanced Eng Phy Lab</i> )..... 3 hr ___ Engineering Elective..... 3 hr ___ Targeted Elective..... 3 hr ___ Physics Elective..... 4 hr

**Total Hours to complete the degree program = 130**

Courses printed in **bold** are taught only during the term shown. Courses printed in **bold italics** are controlled access courses that require pre-enrollment. Information about this process is at [physics.osu.edu/controlled-access-courses](http://physics.osu.edu/controlled-access-courses)

## Program Options

Engineering Physics students are required to take at least 27 hours from one of the following areas of engineering (indicated as Engineering Elective in the above 4-year plan).

Aerospace Engineering	Industrial & Systems Engineering
Chemical & Biomolecular Engineering	Materials Science & Engineering
Computer Science & Engineering	Mechanical Engineering
Electrical Engineering	Nuclear Engineering

Requirements for each concentration can be found at [physics.osu.edu/eng-concentration-requirements](http://physics.osu.edu/eng-concentration-requirements)

## Acceptance Criteria

Admission to the major program requires a formal application and is based on a student's cumulative point-hour ratio (CPHR), eligibility point-hour ratio (EPhR), and additional admission to major courses. Only the most recent grade is used to calculate EPhR. Applications are only accepted during spring term.

EPhR courses: MATH 1151, 1172; PHYSICS 1250, 1251; or equivalent honors or accelerated courses.

---

## Technical and Other electives

The Targeted Electives can be any additional math, physics, or engineering course that is 2000 level or above and not already required by the program or counting toward any other elective. 9 credit hours are required in the category.

Possible Physics electives include Physics 3201H, 3470, 5600, 5300, 5501, 5501H, 5401H, or any of the 68xx courses.

---

## General Education Requirement

### Writing and Communication

English 1110.xx 3 hr

Second Writing Course 3 hr

### Social Science

*Must choose each course from a distinct subgroup of this category.*

\_\_\_\_\_ 3 hr

\_\_\_\_\_ 3 hr

### Literature

\_\_\_\_\_ 3 hr

### Visual and Performing Arts

\_\_\_\_\_ 3 hr

### Historical Study

\_\_\_\_\_ 3 hr

### Second Historical Study or Cultures and Ideas

\_\_\_\_\_ 3 hr

### Social Diversity in the U.S. or Global Diversity

*Some courses may overlap with another GE category, See course list.*

\_\_\_\_\_ 0 / 3 hr

### Ethics

*Some courses may overlap with another GE category, See course list.*

\_\_\_\_\_ 0 / 3 hr

### Optional: Foreign Language

**Foreign Language 1103 Course:** credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be used to satisfy the Cultures & Ideas Gen Ed category.

**Foreign Language Minor Courses:** completion of a foreign language minor permits a student to overlap up to 6 credit hours between the Gen Ed and minor. A curricular petition must be submitted to the student's program, which will forward it to the college for review. The courses must meet the spirit of the Gen Ed category for which overlap is requested.

See the list of approved general education courses for additional details: [www.advising.engineering.osu.edu](http://www.advising.engineering.osu.edu).