

QUEENS COLLEGE

# Physics Secondary Education

## 7-12 BA

FOUR YEAR ACADEMIC PLAN

**12** Required Core Credits

**18** Flexible Core Credits

**12** College Option Credits

**45+27** (SEYS) Major Credits

**6** Elective Credits

*This 4-year academic plan is for freshmen entering Queens College in Fall 2022. Our 4-year academic plans are illustrative examples of integrated degree requirements and course sequencing for each of the College's programs of study which are designed to ensure degree completion in a timely manner. Students are advised to meet with professional and faculty advisors to tailor their degree maps to their individual interests (academic and career goals), as well as other considerations including course offerings and the incorporation of winter and summer sessions. Course pre-requisite/s and co-requisite/s are strictly enforced, as are entrance and maintenance criteria (if applicable) for the successful completion of the degree.*



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## Freshman

### FALL

English Composition I (EC1)	3 credits
MATH 151¥ (MQR)	4 credits
Calculus I	
World Cultures & Global Issues (WCGI)	3 credits
U.S Experience in its Diversity (USED)	3 credits
Creative Expression (CE)	3 credits

**Fall total credits** **16 credits**

### SPRING

English Composition II (EC2)	3 credits
PHYS 1454 & 1451 (LPS)	5 credits
Principles of Physics I	
MATH 152¥	4 credits
Calculus II	
Individual and Society (IS)	3 credits

**Spring total credits** **15 credits**

## Sophomore

### FALL

PHYS 1464 & 1461 (SCI)	5 credits
Principles of Physics II	
MATH 201¥	4 credits
Calculus III	
An Additional Flexible Core	3 credits
General elective	3 credits

**Fall total credits** **15 credits**

### SPRING

Scientific World (SW)	3 credits
College Option Literature (LIT + W) With Writing Intensive Unit*	3 credits
College Option Language (LANG)	4 credits
ASTR 2 (SCI)	4 credits
General Astronomy with Laboratory	
General elective	1 cr

**Spring total credits** **15 credits**

General Education requirements may be taken in any order if the pre-requisite requirement(s) is/are satisfied.

\* If a Literature course is taken with a W, it will count towards Literature and one Writing Intensive Unit.

Completion of 21 credits in major with 2.75 GPA or higher  
3.0 GPA in SEYS courses required to continue in program

¥ Students who fail or withdraw from this course multiple times may be prohibited from majoring in the sciences or mathematics; see your department for questions.



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## Junior

**FALL**

PHYS 233.1	1 credits
Mathematical Methods I	
PHYS 260	4 credits
Modern Physics	
PHYS 242	3 credits
Thermodynamics	
PHYS 220W	2 credits
Current Issues in Physics	
SEYS 201W (W)	3 credits
Historical, Social, and Philosophical	
Foundations of Education	
SEYS 221	3 credits
Development and Learning in Middle Child	
and Adolescence	
<b>Fall total credits</b>	<b>16 credits</b>

**SPRING**

PHYS 235	2 credits
Classical Physics LAB	
PHYS 225	4 credits
Solid State Physics	
SEYS 340	3 credits
Language, Literacy, & Culture in	
Education	
SEYS 362	3 credits
Methods in Teaching Science in	
Middle & High School	
ECPSE 350	3 credits
Foundations of Special Education	
<b>Spring total credits</b>	<b>15 credits</b>

## Senior

**FALL**

PHYS 222	3 credits
Optics	
PHYS 237	4 credits
Mechanics	
SEYS 372.2	3 credits
Student Teaching Initial Clinical Experience	
in Science for Secondary School	
SEYS 382	3 credits
Curriculum and Assessment in Teaching Science	
SEYS 350	3 credits
Cognition, Technology & Instruction	
For Diverse Learners	
<b>Fall total credits</b>	<b>16 credits</b>

**SPRING**

PHYS Elective	6 credits
200 or above	
SEYS 372.4	3 credits
Student Teaching Clinical Experience in	
Science for Secondary School	
General electives*	6 credits
<b>Spring total credits</b>	<b>15 credits</b>

\*\*General Electives: Students may complete general electives by taking courses in (most) department/s or programs they choose; however, depending on the course/program, students may need department permission and/or prerequisite course/s. Electives may be used to supplement the chosen major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a different area (a Music major may be interested in the physics of sound). Students are encouraged to use available electives to complete a dual major, minor, pre-requisites for graduate or professional school, or complete and internship, experiential learning and/or study abroad. Students are encouraged to use their available general electives wisely and focus on coursework that will assist them personally, academically and professionally.