

Physics BA

12 Required Core Credits

18 Flexible Core Credits

12 College Option Credits

57 Major Credits

21 Elective Credits

This 4-year academic plan is designed to help freshmen entering Queens College in Fall 2023. 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.

Physics BA

Freshman

FALL

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

Fall total credits 16 credits

SPRING

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

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
One Writing Intensive Unit (W)	3 credits

Fall total credits 15 credits

SPRING

PHYS 234	3 credits
Mathematical Methods II	
Scientific World (SW)	3 credits
College Option Literature (LIT + W) With Writing Intensive Unit*	3 credits
College Option Language (LANG)	4 credits
An Additional College Core	3 credits

Spring total credits 16 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.

¥ 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.

Physics BA

Junior

FALL

PHYS 233 Mathematical Methods I	3 credits
PHYS 260 Modern Physics	4 credits
PHYS 242 Thermodynamics	3 credits
PHYS 222 Optics	3 credits
General electives**	3 credits

Fall total credits 16 credits

SPRING

PHYS 235 Classical Physics LAB	2 credits
PHYS 237 Mechanics	4 credits
General electives	9 credits

Spring total credits 15 credits

Senior

FALL

PHYS 310 Electromagnetism I	4 credits
PHYS 365 Quantum Mechanics	4 credits
PHYS 377 Modern Physics LAB	2 credits
General electives	5 credits

Fall total credits 15 credits

SPRING

PHYS Elective 200 or above	3 credits
General electives*	12 credits

Spring total credits 15 credits

**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.