Physics

The Faculty of Sciences at Haigazian University offers a program leading to a Bachelor of Science degree in Physics.

Graduates of the Physics program will:

- Demonstrate critical thinking by developing a thorough knowledge and comprehension of the core concepts of classical and modern physics.
- Use a set of fundamental skills that can be applied to a variety of situations, including a) writing skills; b) presentation skills; c) laboratory skills; d) computer skills; and e) problem solving.
- Show mastery of fundamental physics laboratory techniques in a safe and proficient manner.
- Demonstrate an understanding of scientific literature.
- Integrate the scientific method into problem-solving and experimentation.

Students majoring in Physics must pass PHY 211 and 212 with a minimum grade of 70.

To be eligible for graduation with the degree of Bachelor of Science in Physics, a student must satisfactorily complete the prescribed program of study with a minimum of 94 credit hours after the Freshman Science Class, or its equivalent, and attain a cumulative average of 70.

The Department also offers a minor in Physics that requires 18 credits: PHY 211/213, PHY 212, PHY 217, PHY 221, 2 courses chosen from the following groups: PHY 219, PHY 220, PHY 227 (advised for Mathematics majors), PHY 208, PHY 215, PHY 222 (advised for Biology majors), PHY 222, PHY 223, PHY 224 (advised for Physics majors). For more details regarding minors, kindly refer to the Minors section of the catalog.

General Education (30 cr.)

Core requirements are listed on page 58.

Core Requirements:

Student majoring in Physics must fulfill at least 37 credit hours in Physics:

PHY 211	Electricity and Magnetism	3 cr.
PHY 212	Modern Physics	3 cr.
PHY 213	Electricity and Magnetism Laboratory	1 cr.
PHY 214	Modern Physics Laboratory	1 cr.
PHY 215	Thermodynamics	3 cr.
PHY 217	Mechanics	3 cr.

PHY 218 Electronics	3 cr.
PHY 219 Quantum Mechanics	3 cr.
PHY 220 Electromagnetic Theory	3 cr.
PHY 221 Advanced Laboratory	2 cr.
PHY 223 Physical Optic	3 cr.
PHY 226 Solid State Physics	3 cr.

Select at least 6 credit hours from :

PHY 222 Environmental Physics	3 cr.
PHY 224 Acoustics	3 cr.
PHY 225 Nuclear Physics	3 cr.
PHY 227 Mathematic Methods of Physics	3 cr.
PHY 229 Solid State Electronics	3 cr.
PHY 233 Digital Electronics	4 cr.
PHY 234 Astrophysics	3 cr.
PHY 292 Special Topics	1-3 cr.

The student must also complete :

MAT 201 Calculus	3 cr.
MAT 202 Differential Equations	3 cr.
MAT 219 Linear Algebra	3 cr.
CSC 202 Computer Programming	3 cr.
CHY 201 Chemical Principles	3 cr.