PHYSICS (COURSE 8)

Bachelor of Science in Physics (Flexible Option)

General Institute Requirements (GIRs)
The General Institute Requirements include a Communication Requirement that is integrated into both the HASS Requirement and the requirements of each major; see details below.

Summary of Subject Requirements | Subjects
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Science Requirement | 6
Humanities, Arts, and Social Sciences (HASS) Requirement; at least two of these subjects must be designated as communication-intensive (CI-H) to fulfill the Communication Requirement. | 8
Restricted Electives in Science and Technology (REST) Requirement [can be satisfied by 8.03 or 8.04, and 18.03 in the Departmental Program] | 2
Laboratory Requirement (12 units) [satisfied by 8.13 or equivalent in the Departmental Program] | 1
Total GIR Subjects Required for SB Degree | 17

Physical Education Requirement
Swimming requirement, plus four physical education courses for eight points.

Departmental Program
Choose at least two subjects in the major that are designated as communication-intensive (CI-M) to fulfill the Communication Requirement.

Required Subjects | Units
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18.03 | Differential Equations ¹
8.03 | Physics III
8.04 | Quantum Physics I
8.044 | Statistical Physics I
8.21 | Physics of Energy
or 8.223 | Classical Mechanics II
Select one of the following: | 9-12
8.05 | Quantum Physics II
8.20 | Introduction to Special Relativity
8.033 | Relativity
Select one of the following experimental experiences, subject to the approval of the department: | 18
8.13 | Experimental Physics I (CI-M)
A laboratory subject of similar intensity in another department
An experimental research project or senior thesis ²

Restricted Electives
At least one subject in the Department of Physics in addition to those listed above ³
Three subjects forming one intellectually coherent unit in some area, not necessarily physics, subject to the approval of the department

Units in Major | 129-138
Unrestricted Electives | 66-87
Units in Major That Also Satisfy the GIRs | (24-36)
Total Units Beyond the GIRs Required for SB Degree | 180

The units for any subject that counts as one of the 17 GIR subjects cannot also be counted as units required beyond the GIRs.

¹ 18.032 Differential Equations is also an acceptable option.
² Not more than 30 units of thesis credit may be included in the minimum units beyond the General Institute Requirements required for the SB degree.
³ Subject descriptions identify subjects that cannot be used for this purpose.

Communication-Intensive Subjects in the Major
To satisfy the requirement that students take two CI-M subjects, students must select two of the following:

| Units |
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8.06 | Quantum Physics III |
8.13 | Experimental Physics I |
8.14 | Experimental Physics II |
8.226 | Forty-three Orders of Magnitude |
12.410[J] | Observational Techniques of Optical Astronomy |
STS.042[J] | Einstein, Oppenheimer, Feynman: Physics in the 20th Century |