## PHYSICS MAJOR, B.S. DEGREE (PY29)
### Total Units: 109

### Lower Division (52 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units Yet to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 4A-B-C-D-E or Physics 2A-B-C-D(^1)</td>
<td>20 or 16</td>
</tr>
<tr>
<td>Physics 2CL and Physics 2DL</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 6A or a programming course(^2)</td>
<td>4 or 8</td>
</tr>
<tr>
<td>Math 18(^3) and 20A-B-C-D-E</td>
<td>24</td>
</tr>
</tbody>
</table>

### Upper Division (57 units)

- A course that is listed in several areas cannot count towards more than one area and can satisfy only ONE of the major requirements:
  1. Physics 100A-B, 105A, 110A, 120, 130A-B, 140A, and an additional laboratory course from the lab group: Physics 122, 124, 133, 164, 173 .......................................................................................................................... 37    
  2. Two courses from either the theoretical or experimental pre-grad-school sequence below ..................8    
    - Theoretical pre-grad-school sequence: Physics 100C, 105B, 110B, 130C, 140B
    - Experimental pre-grad-school sequence: Physics 100C, 110B, 124, 130C, 140B
  3. Restricted Electives:
     - Three upper-division (four-unit) or graduate courses in physics or mathematics (only one)\(^4\) .................12     
     - Elective Courses Taken: ________________________________

### MAJOR REGULATIONS

#### DOUBLE MAJORS
A student with a double major must fulfill the separate requirements of each major, and the equivalent of at least ten upper-division courses (forty units) must be unique to each major. Courses taken in fulfillment of lower-division requirements may overlap to any degree.

#### GRADE REQUIREMENTS
A grade point average of 2.0 or higher in the upper-division major is required for graduation. Students must receive a grade of C– or better in all courses to be applied to the major. In exceptional cases, students with a grade point average of 2.5 or higher in the upper-division major may petition to have one grade of D accepted; approval is not guaranteed.

#### P/NP GRADING OPTION
Not allowed for any courses applied to the major (exceptions are courses completed via AP/IB, and Physics 199).

#### PREREQUISITES
Check the General Catalog for the prerequisites to all listed courses.

#### RESIDENCE REQUIREMENTS
At least nine upper-division courses in the major while in residence at UC San Diego.

#### SUBSTITUTIONS
Permissible only by approved petition.

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\(^1\) The Physics 4 series is recommended, but the Physics 2 sequence is acceptable, in which case both Chemistry 6A and a programming course are required.

\(^2\) Programming course options: CENG 15; CSE 5A, 7, 8A, 11, 12, 86; MAE 8; NANO 15

\(^3\) The Linear Algebra course previously numbered Math 20F is acceptable.

\(^4\) A max of one four-unit Physics 199 course can be applied. Courses in other science disciplines may be substituted by petition.

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To see a 4-year, quarter-by-quarter plan for this degree: Go to [http://plans.ucsd.edu/](http://plans.ucsd.edu/)

Advising for current UC San Diego students: Go to [http://vac.ucsd.edu/](http://vac.ucsd.edu/)

Advising for prospective UC San Diego students: Email advising@physics.ucsd.edu