

**PHYSICS MAJOR, B.S. DEGREE**  
*SPECIALIZATION: MATERIALS (PY32)*  
 Total Units: 125-129

**Lower Division (56-60 units)**

**UNITS YET TO COMPLETE**

Physics 4A-B-C-D-E <i>or</i> 2A-B-C-D <sup>1</sup> .....	20 or 16 _____
Physics 2CL and 2DL .....	4 _____
Chemistry 6A-B .....	8 _____
Math 18 <sup>2</sup> and 20A-B-C-D-E .....	24 _____
A programming course <sup>3</sup> .....	4 _____

**Upper Division (69 units)**

1. Physics 100A-B, 105A-B, 110A, 120, 124, 130A-B, 140A, 133, 152A-B .....	53 _____
2. Four restrictive electives to be chosen from Chemistry 120A-B; Mathematics 120A; ECE 103, 134, 135A-B, 136, 136L; MAE 110A, 160; or an upper division physics course .....	16 _____

**MAJOR REGULATIONS**

<b>LIMIT OF USE</b> .....	A course that is listed in several areas cannot count towards more than one area and can satisfy only ONE of the major requirements.
<b>DOUBLE MAJORS</b> .....	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.
<b>GRADE REQUIREMENTS</b> .....	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.
<b>P/NP GRADING OPTION</b> .....	Not allowed for any courses applied to the major (exceptions are courses completed via AP/IB and a single 4-unit Physics 199).
<b>PREREQUISITES</b> .....	Check the <u>General Catalog</u> for the prerequisites to all listed courses, especially courses outside of the department that apply to the restricted electives.
<b>RESIDENCE REQUIREMENTS</b> .....	At least eleven upper-division courses in the major while in residence at UC San Diego.
<b>SUBSTITUTIONS</b> .....	Permissible only by approved petition.

<sup>1</sup> The Physics 4 series is recommended.  
<sup>2</sup> The Linear Algebra course previously numbered Math 20F is acceptable.  
<sup>3</sup> Programming course options: CENG 15; CSE 5A, 7, 8A, 11, 12, 86; MAE 8; NANO 15

**To see a 4-year, quarter-by-quarter plan for this degree:** Go to <http://plans.ucsd.edu/>  
**Advising for current UC San Diego students:** Go to <http://vac.ucsd.edu/>  
**Advising for prospective UC San Diego students:** Email [advising@physics.ucsd.edu](mailto:advising@physics.ucsd.edu)