PHYSICS DEGREE REQUIREMENTS

Basic Requirements
Math 2A____ 2B____
2D/H2D____ 2E/H2E____
3A____ 3D____
Physics 7C____ D____ E____
7LC____ 7LD____
50____ 60____
61A____ 61B____
52A____ 52B____ 52C____
Physics 53____ (or another programming course)
Physics 111A____ B____
Physics 112A____ B____
Physics 113A____
Physics 115A____
Physics 121____
Physics 125A____
Physics 194____
Five additional coherently related four-unit courses (these are normally satisfied by tracks, concentrations, or specializations)*.

Concentration in Applied Physics
In place of the five coherently related courses students must choose six coherently related Engineering courses. These six courses must be approved in advance by the Department of Physics and Astronomy.
(Note: All upper-division Engineering courses require lower-division prerequisites which should be started in the Freshman and Sophomore years.):

Specialization in Astrophysics
In place of the five coherently related courses, students take:
Physics 139____
and
Three astrophysics courses from:
Physics 137____ 138____
144____ 145____
and
Any two approved upper division
Physics electives

Concentration in Biomedical Physics
In place of the five coherently related courses, students take:
Bio Sci 97____ 98____ 99____
Chem 1A____ B____ C____
1LC____ LD____
Chem 51A____ 51B____; or
H52A____ H52B____

Concentration in Computational Physics
In place of the five coherently related courses, students take:
ICS 31____ 32____ 33____
Math 105A____ 105LA____
Math 105B____ 105LB____
Math 107____ 107L____

Concentration in Philosophy of Physics
In place of the five coherently related courses, students take:
One course selected from:
Philosophy or LPS 30____
104____ 105A____ B____ C____
Math 150____ 151____ 152____
One course selected from:
History 60____ 135B____
135C____ or an approved alternative
Three courses selected from:
Philosophy or LPS 102____ 121____
141A____ 141B____ 141C____ 141D____
The following three courses:
Philosophy or LPS 31____
Philosophy or LPS 140____
Physics 113B____

Concentration in Physics Education
In place of the five coherently related courses, students take:
Physics 193____
Educ 55____
Phy Sci 5____ 105____
(Phy Sci 106 is recommended)
Four courses selected from:
Bio Sci 1A____ or
Bio Sci 93____ 94____
Chem 1A____ 1B____ 1C____
ESS 1____ ESS 7____
Physics 20A____ 20B____
Primary Teaching Certification Option:
With additional coursework and field experience, students who complete the Concentration in Physics Education can also earn a California Preliminary Single Subject Teaching Credential in four years with careful, early planning.
All of the following are required:
LPS 60____ Educ 109____
**Educ 143A____ 143B____ 148____
Educ 158 (2 quarters)____
**Educ 143A-B and 148 will be accepted in lieu of Physics 125A and 194.