# Physics Degree Requirements

## Basic Requirements
- Math 2A □ Math 2B □ Math 2D
- Math 2E □ Math 3A □ Math 3D
- Physics 7C-7D-7E-7LC-7LD
- Physics 50 □ Physics 60
- Physics 61A
- Physics 61B OR 61C
- Physics 52A
- Physics 52B
- Physics 52C
- Physics 53 (or another programming course)

- Physics 111A □ Physics 111B
- Physics 112A □ Physics 112B
- Physics 113A
- Physics 115A
- Physics 121W
- Physics 125A
- Physics 194

Five additional coherently related four-unit courses (these are normally satisfied by tracks, concentrations, or specializations)*.

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*Note: Tracks, concentrations and specializations usually require six or more coherently related courses.

## Specialization in Astrophysics
In place of the five coherently related courses, students take:
- □ Physics 61C □ Physics 139

**Three courses from:**
- Physics 137, 138, 144, 145
- □ □ □

**Two approved upper division Physics electives**
- □ □ □

## Concentration in Computational Physics
In place of the five coherently related courses, students take:
- □ ICS 31 □ ICS 32 □ ICS 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:
- □ LPS 31 □ Physics 113B

**One course selected from:**
- LPS 40, 60, H80, H125
- Soc Sci H1G
- □

**One course selected from:**
- LPS 30, 104, 105A, 105B, 105C
- Math 150, 151, 152
- □

**One course selected from:**
- LPS 104, 105A, 105B, 105C, 140
- Math 150, 151, 152
- History 135D (when topic is Physics)
- Or another approved course
- □

**Three courses selected from:**
- LPS 141A, 141B, 141C, 141D
- Or another approved Philosophy of Physics course
- □

## Concentration in Physics Education
In place of the five coherently related courses, students take:
- □ Phy Sci 5 □ Phy Sci 105
- □ Educ 55 □ Physics 193

**Four courses selected from:**
- Bio Sci 1A, 93, 94
- Chem 1A, 1B, 1C
- ESS 1, 7
- Physics 20A, 20B
- □ □ □

**Secondary 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 □ Educ 143B
- □ Educ 148
- □ Educ 158 □ Educ 158 (two quarters required)

**Educ 143A-B and 158 will be accepted in lieu of Physics 125A and 194.**