

PHYSICS, ASSOCIATE IN ARTS DEGREE

Banner code: 2_AA_PHYS

Financial aid: Eligible

The Associate in Arts Degree in Physics prepares students for further study in physics or related physical science disciplines. It also provides a background in physics that includes skills appropriate for entry-level employment in science-related industries or laboratories. Coursework includes instruction in all of the main areas of classical physics (mechanics, waves, sound, thermodynamics, electromagnetism, and optics), exposure to some of the more modern concepts of physics (including special relativity, atomic and nuclear physics), and prepares students to think critically and apply reasoning skills to analyze real world situations.

Program Level Learning Outcomes

Upon completion of this program, students will be able to:

1. Explain the basic principles and concepts of physics.
2. Use these basic principles and concepts to solve problems in the various areas of physics.
3. Explain the importance of physics both historically and as an active, unfinished area of work in which many people today are actively engaged.
4. Describe the methods of physicists.

Associate Degree Graduation Requirements

(See GWC website (<http://www.goldenwestcollege.edu>) for the most up-to-date information on Associate Degree Requirements (<https://catalog.cccd.edu/golden-west/general-education/associate-degree/>.)

1. Completion of General Education Requirements by one of the following methods:
 - a. Completion of a minimum of 18 units as listed under Areas A through E, including the Cultural Diversity Requirement.
 - b. Completion of a minimum of 39 units of CSU General Education requirements. Students who complete this pattern are also eligible to receive the Certificate of Achievement in CSU General Education Breadth (<https://catalog.cccd.edu/golden-west/general-education/csu-ge/>).
 - c. Completion of a minimum of 34 (UC) or 37 (CSU) units of Intersegmental General Education Transfer Curriculum (IGETC) requirements. Students who complete this pattern are also eligible to receive the Certificate of Achievement in IGETC (<https://catalog.cccd.edu/golden-west/general-education/igetc/>).
2. Completion of a Major or Area of Emphasis—a minimum of 18 units.
3. Completion of additional elective units to a total of 60 units.
4. 2.0 overall Grade Point Average at GWC and 2.0 overall Grade Point Average for all colleges attended.
5. At least 12 units completed at GWC.

Students should consult a GWC counselor in order to select the best pathway to meet their educational goals. For students who intend to

transfer, the choice of general education will be specific to both their major and transfer institution.

Course	Title	Units
Required Courses		
PHYS G185	Calculus Based Physics: Mechanics	4
PHYS G280	Calculus Based Physics: Electricity/ Magnetism	4
PHYS G285	Calculus Based Physics: Modern	4
MATH G180	Calculus I	5
MATH G185	Calculus 2	5
Major Total		22
GE Pattern (Local, CSU GE-Breadth, or IGETC)		18-39
Total Units		60