

Physics

Physics AS-T Degree

The Associate in Science in Physics for Transfer (AS-T in Physics) provides a foundation in physics and mathematics and a seamless transfer to a CSU baccalaureate program in physics or physics education. The program will prepare students for a clear pathway to a CSU institution by educating them in the fundamental concepts of physics, developing analytical and quantitative reasoning skills, gaining comprehension of the integrated nature of mathematics and sciences, and executing experimental methods, assessment, and interpretation of scientific physical phenomena.

Program student learning outcomes:

1. Students will draw from an understanding of modern and classic physics to identify the interrelationships between physics and other sciences.
2. Students will apply the scientific method to an experiment from design to data interpretation.
3. Students will use a systematic approach to solve a problem, test the solution's correctness, and interpret the results in terms of the physical reality they represent.
4. Students will utilize technology and computer applications for data acquisition, scientific writing, presentation, and analysis of physics and related principles.
5. Students will apply logic and high-level mathematics to systematically solve a problem of physical reality.

Students must meet the following requirements to qualify for an Associates for Transfer Degree (ADT):

- Complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University (CSU), including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education (CSU GE) Breadth Requirements
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtain a minimum grade point average of 2.0
- Minimum grade of "C" (or "P") for each course in the major, and
- Completion of the IGETC and/or CSU GE-Breadth

<i>Course #</i>	<i>Title</i>	<i>Units</i>
Required Core Courses (26 Units)		
PHYSICS 004A	Classical Mechanics	4
PHYSICS 004B	Electricity, Magnetism, and Waves	4
PHYSICS 004C	Thermodynamics, Optics, and Modern Physics	4
MATH 001A	Introduction to Calculus	5
MATH 001B	Calculus With Applications	5
MATH 002A	Multivariate Calculus	4
	Total Major Units.....	26
	Units to be double-counted as General Education.....	6-7
	CSU GE Breadth or IGETC units.....	39-37
	Transferable Elective Units.....	1-4
	Total	60