

# PHYSICS

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## Physics: Associate in Science for Transfer (AS-T)

The Associate in Science in Physics for Transfer (AS-T in Physics) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Physics. California Community College students who are awarded an Associate in Science in Physics for Transfer (AS-T in Physics) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

The Associate in Science in Physics for Transfer (AS-T in Physics) provides a foundation in physics and mathematics for students planning to transfer into a baccalaureate program in physics or physics education. Successful completion of the program guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in Physics or a related field. Upon completion of the program, students will understand the principles of physics and be able to apply these theoretical and analytical principles to real world situations.

### Program Learning Outcomes:

- Apply the scientific method to investigate physics problems by collecting and quantitatively analyzing data.
- Understand the principles of physics and be able to apply these theoretical and analytical principles to real world situations.

### Career/Transfer Opportunities:

Career opportunities include the following: astronomer, architect, chemist, geologist, engineer, physicist, physical scientist, meteorologist and oceanographer.

### To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C (or P) or better.
2. Completion of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Note: Completing courses that satisfy CSU's U.S. History, Constitution and American Ideals requirement prior to transfer is highly recommended.

Core Requirement Courses (27 units):		Units
PHY 004A	Engineering Physics-Mechanics	5.0
PHY 004B	Engineering Physics-Electricity and Magnetism	4.0
PHY 004C	Engineering Physics-Light and Heat	4.0
MAT 003A	Analytic Geometry and Calculus I	5.0
MAT 003B	Analytic Geometry and Calculus II	5.0
MAT 004A	Multivariable Calculus	4.0

**Required Units for the Major: 27.0**

Completion of General Education Requirements and electives as needed to reach 60 units.

**Total Required Units: 60.0**

