

PHYSICS ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE

The Associate of Science for Transfer (AS-T) in Physics provides students with a deep understanding of the world around them. This degree provides students with transfer preparation and pre-professional training. The AS-T in Physics explores with finding and using the rules that govern everything—from the smallest pieces of the atom to the various collections of atoms—molecules, balls, planets, stars, and more—that compose the myriad contents of the universe. Students should consult with a counselor to determine whether this degree is the best option for their transfer goals.

The Associate in Art for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

To earn a Physics AS-T degree, students must complete the following Associate Degree for Transfer requirements:

- completion of the following major requirements with grades of C or better;
- completion of a minimum of 60 CSU transferable semester units with a grade point average of at least 2.0; and
- certified completion of the CSU General Education-Breadth (CSU-GE) or Intersegmental General Education Transfer Curriculum (IGETC) for CSU, which requires a minimum of 37-39 units.

It is highly recommended that students complete courses that satisfy the U.S. History, Constitution, and American Ideals requirement as part of CSUGE or IGETC before transferring to a CSU.

Students planning to transfer to a baccalaureate institution and major in Physics should consult with a counselor regarding the transfer process and lower division requirements.

Code	Title	Units
Required Core Courses		
MATH 250	Single Variable Calculus I	4
MATH 251	Single Variable Calculus II	4
MATH 252	Multivariable Calculus	5
PHYSIC 202	Physics I	4
PHYSIC 203	Physics II	4
PHYSIC 204	Physics III	4
Code		
Title		
Units		
Major Total		25
Total Units That May Be Double Counted		7

General Education (CSU-GE or IGETC) Units	37-39
Elective (CSU Transferable) Units	0-5
Total Units	60

See Section on Degree, Certificate, and Transfer Information for additional information on the Associate Degrees for Transfer.

To earn an SBVC Associate Degree for Transfer (AA-T or AS-T) students must complete one of the following general education patterns:

CSU GE requirements (<https://www.valleycollege.edu/student-services/counseling/csuge/>)

IGETC requirements (<https://www.valleycollege.edu/student-services/counseling/igetc/>)

Program Learning Outcomes

At the completion of this program, students will be able to:

- Transfer to an accredited university as a junior with a major in physics or a physics-related major
- Integrate physical concepts and principles to other science disciplines
- Develop a world view that incorporates the role of physics in modern society
- Solve work-related problems by employing physical concepts to formulate and solve representative physical models
- Apply physical knowledge and skills required in securing and maintaining employment
- Demonstrate a proficiency in standard physics laboratory techniques commonly acquired in lower-division coursework