

ASSOCIATE IN SCIENCE IN PHYSICS FOR TRANSFER (AS-T)

Students completing the Associate in Science in Physics for Transfer will be able to seamlessly transfer to the CSU system to pursue a baccalaureate degree in Physics. The degree also meets many of the admission requirements for UC physics programs. Students completing this degree will have an introductory foundation in the field of Physics through the study of mechanics, thermodynamics, electricity, magnetism, optics and modern physics. Students will acquire skills and abilities in identifying, formulating and solving physics problems; designing, conducting and analyzing experiments; and critical thinking.

Program Outcomes

- Develop the ability to identify, formulate, and solve physics problems.
- Develop the ability to design and conduct experiments, as well as to analyze and interpret experimental data.
- Develop the ability to use critical thinking in problem solving.

Transfer & Career Opportunities

This Associate in Science in Physics for Transfer (AS-T) degree is intended to meet the lower division requirements for Physics for all CSU campuses. Taking additional courses in mathematics and chemistry is encouraged to be fully prepared for upper division courses. Students planning to transfer to the CSU or UC systems are encouraged to consult ASSIST.org (<http://ASSIST.org>) and a COS counselor for program planning and course selection. Most common career opportunities with a baccalaureate degree include physics laboratory technician, computer scientist, scientific sales, and high school science teacher.

Program Requirements

Code	Title	Units
GENERAL EDUCATION		37-39
Select one of the following General Education patterns:		
California State University General Education (CSU-GE) *		
Intersegmental General Education Transfer Curriculum (IGETC-CSU) **		
+		
REQUIRED MAJOR COURSES		25
MATH 065	Calculus 1 *	4
MATH 066	Calculus 2	4
MATH 067	Calculus 3	4
PHYS 055	Physics 1: Mechanics & Waves *	4
PHYS 056	Physics 2: E&M and Heat	4
PHYS 057	Physics 3: Modern Physics	5
+		
ELECTIVES		2-5
Select additional transferable courses numbered 1-199 to achieve 60 units.		
The Science Division recommends the additional units be met by completing one of the following lower division major preparation courses:		
CHEM 001	General Chemistry 1	5

CSCI 001	Programming Concepts/Method 1	4
MATH 080	Linear Algebra	4
MATH 081	Differential Equations	5
=		
TOTAL		60

* Course(s) meets General Education requirement and 6 units may be double counted above in 1A (CSU GE).

** 7 units may be double counted above in 1B (IGETC-CSU). IGETC-CSU requires completion of IGETC AREA 1C.

The Associate in Science Degree for Transfer requirements include completion of the 60 unit program defined above with at least 12 units taken in residence at College of the Sequoias with a "C" (2.0) average and a "C" or better grade in all required major and restricted electives courses (see Transfer Information and Requirements (<https://catalog.cos.edu/transfer-information-requirements/>) for additional details).