

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

The Associate in Science Degree for Transfer requirements include completion of the 65 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).

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 completes most of the courses for the first two years of 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 chemistry is encouraged as many physics bachelor's programs require up to one year of majors level general chemistry. 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. The most common career opportunities with a bachelor's degree include engineering, software development, research technician roles, and high school science teaching.

## Program Requirements

Code	Title	Units
GENERAL EDUCATION		34
California-General Education Transfer Curriculum (Cal-GETC)		
+		
REQUIRED MAJOR COURSES		38
CSCI 001	Programming Concepts/Method 1	4
MATH 065	Calculus 1 *	4
MATH 066	Calculus 2	4
MATH 067	Calculus 3	4
MATH 080	Linear Algebra	4
MATH 081	Differential Equations	5
PHYS 055	Physics 1: Mechanics & Waves *	4
PHYS 056	Physics 2: E&M and Heat	4
PHYS 057	Physics 3: Modern Physics	5
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TOTAL		65

\* Course(s) meets General Education requirement and 7 units may be double counted above in Cal-GETC.