

PHYSICS 2.0 - ASSOCIATE IN SCIENCE FOR TRANSFER

The goal of the Associate in Science in Physics 2.0 for Transfer (AS-T) degree is to provide a lower-division science foundation for those interested in pursuing physics as a major field of study. The study of physics encompasses all interactions and energy exchanges observed among natural systems. It explains the behavior of the smallest particles in the atom, quantifies and predicts power consumption of household appliances, and explains the movements of big complex systems such as planets, stars, galaxies, and the universe in large scale. The completion of courses in general physics provides a foundation that will expand the student's worldview, bringing appreciation and understanding of nature's main processes.

To be awarded the Associate in Science in Physics 2.0 for Transfer degree, students must:

(1) Complete 62 semester units or 93 quarter units that are eligible for transfer to the California State University (CSU) system, including both of the following:

(A) The California General Education Transfer Curriculum (Cal-GETC)

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtain a minimum grade point average of 2.0.

While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.

Associate Degrees for Transfer (ADTs) also require that students earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Please Note: High School Preparation: Courses in physics, chemistry, and four years of high school mathematics are required. If this preparation is not complete, Evergreen Valley College offers courses to meet this preparation. If the preparation is not complete, it may take more than two years to complete the AS-T degree. No more than 62 units are required for this degree and no additional requirements will be imposed by Evergreen Valley College.

Program Learning Outcomes

- Identify all of the physical quantities in a problem, and define the steps to model and solve real world problems.
- Use inductive and deductive reasoning to analyze evidence to arrive at logical conclusions.
- Demonstrate proficiency in assembly of experimental apparatuses to conduct and analyze measurements of physical phenomena.
- Assess experimental uncertainty to aid in making meaningful comparisons between experiment and theory.

Major Requirements

Course	Title	Units
Core Requirements		
PHYS 007A	Calculus-Based General Physics for Scientists and Engineers - I	4

PHYS 007B	Calculus-Based General Physics for Scientists and Engineers - II	4
PHYS 007C	Calculus-Based General Physics for Scientists and Engineers - III	4

Select Option 1 or Option 2 for Math sequences:

Option 1:		
MATH 066	Calculus I Late Transcendentals for STEM	4
MATH 067	Calculus II Late Transcendentals for STEM	4
MATH 073	Multivariable Calculus	5
MATH 078	Differential Equations	4
MATH 079	Linear Algebra	3
Option 2:		
MATH 071	Calculus I With Analytic Geometry	5
MATH 072	Calculus II With Analytic Geometry	5
MATH 073	Multivariable Calculus	5
MATH 078	Differential Equations	4
MATH 079	Linear Algebra	3

Choose one programming course from the following:

COMSC 041	Programming Concepts and Methodology I	3
COMSC 075	Computer Science I: Introduction to Program Structures	3

Total Requirements

Course	Title	Units
Major Requirements		35-37
General Education Requirements (Cal-GETC) ¹		34
Transferable Electives (as needed to complete 62 units)		
Total Units		62

¹ Some GE courses may be double-counted within the major and will reduce the number of units. General electives may be needed to reach 60 units. Please consult with a counselor to determine which courses are applicable.