



# Physics Transfer Degree

18-19

## COUNSELING CENTER ADVISING

### AST-Associate Degree

#### Physics for Transfer

#### Required Core Courses:

* PHYS 110, General Physics	4
PHYS 120, General Physics	4
PHYS 211, General Physics	5
* MATH 150, Calculus and Analytic Geometry	5
MATH 160, Calculus and Analytic Geometry	4
MATH 250, Calculus and Analytic Geometry	4
<b>Units Required for Major</b>	<b>26</b>

#### other requirements for degree

CSU GE Breath or IGETC Pattern	37-39
CSU Transferrable Elective Units to reach Degree Total	0
<b>Minimum Units Required</b>	<b>60</b>

\*Courses denoted with an asterisk will fulfill the completion requirements for both the major and general education.

#### General Education Requirements:

Complete either the CSU Breath Requirements or IGETC.

The Associate in Science in Physics for Transfer (AS-T in Physics) degree offers students a fundamental knowledge of Physics and its relation to science, technology, and engineering. Students will enhance their problem solving and critical thinking skills by applying mathematical models to real world problems or utilizing mathematical objects and theorems to evaluate the validity of a statement or to prove mathematical statements.

The Associate in Science in Physics for Transfer (AS-T in Physics) degree meets the requirements of SB 1440 for Associate Degrees for Transfer (ADT). These degrees are intended to make it easier for students to transfer to California State University campuses, but do not exclude admittance to other colleges or universities.

To earn an Associates of Science in Physics for Transfer (AS-T in Physics) degree a student must complete the following:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
  - A. \*The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
  - 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. Obtainment of a minimum grade point average of 2.0.

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis.

#### Electives

The remaining number of units (up to a minimum of 60) are considered electives. Any course that has already been counted toward (1) the general education requirements, or (2) the major, cannot be used as an elective. Any course with a designation of "CSU" (for CSU Breadth) or "UC" (for IGETC) at the end of a course description can be used as an elective.

#### Grade Point Average Requirement

An overall grade point average of 2.0 ("C" average) is required.

**Double Counting:** While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major or area of emphasis requirement.

#### Residence Requirement

Of the required 60 units, "at least 12 semester units must be completed in residence at the college granting the degree." Title 5, Section 54000 et seq. Title 5 of the California Code of Regulations is available at <http://ccr.oal.ca.gov> and in the Antelope Valley College Library.

#### Requirements for Two or More Associate Degrees

To be eligible for multiple associate degrees, a student must have completed all of the graduation requirements for each degree.

#### Transfer

Students planning to continue studies at a four-year college or university after AVC should visit the Transfer Resource Center and consult with a counselor as soon as possible to develop a plan of studies. Additional information on official transfer articulation agreements from AVC to many CSU/UC campuses can be found at the following Web site: [www.assist.org](http://www.assist.org)

Transferability of courses to the CSU or UC systems is indicated at the end of a course description by the notation "(UC, CSU)." For the transferability of courses to all other universities, please consult with a counselor or the Transfer Resource Center.

The "Catalog Rights Policy" sets forth the criteria used for determining the degree requirements under which students may graduate. Please refer to the AVC Catalog for a detailed description or consult with a counselor.

#### Prerequisite Completion

If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade in order to enroll in the next course. According to Title 5, Section 55200(d), a satisfactory grade is a grade of "A," "B," "C" or "P". Students who enroll in classes for which they do not meet the prerequisites will be involuntarily dropped. Students will be notified of this involuntary drop.

For an educational plan, please consult with a counselor. To obtain counseling services please call: (661) 722-6338

Antelope Valley College's website: [www.avc.edu](http://www.avc.edu)

To contact the Mathematics, Science, & Engineering Division, please call: 661-722-6300 ext. 6415

MATH 065 BASIC MATH

*Advisory:* Eligibility for ENGL 100A.

MATH 070 ELEMENTARY ALGEBRA

**Prerequisite:** Eligibility for MATH 070 (AVC assessment) or Completion of MATH 065.

*Advisory:* Eligibility for READ 099.

MATH 102 \*INTERMEDIATE ALGEBRA

**Prerequisite:** Eligibility for MATH 102 (AVC assessment) or Completion of MATH 070.

*Advisory:* Eligibility for READ 099.  
(AVC)

MATH 105 METHODS OF PROOF FOR  
PRECALCULUS

**Prerequisite:** Eligibility for MATH 105 (AVC assessment) or Completion for MATH 102.

*Advisory:* Eligibility for READ 099.  
(CSU, AVC)

MATH 135 \*PLANE TRIGONOMETRY

**Prerequisite:** Completion of MATH 102, or Eligibility for MATH 135 (AVC Assessment).

*Advisory:* Concurrent enrollment in MATH 105,  
Eligibility for ENGL 101 and College Level Reading.  
(CSU, AVC)

MATH 140 \*PRECALCULUS

**Prerequisite:** Completion of MATH 105 and 135 or  
Eligibility for MATH 140 (AVC Assessment).

*Advisory:* Eligibility for College Level Reading.  
(CSU, UC, AVC)

MATH 150 CALCULUS AND ANALYTIC  
GEOMETRY

**Prerequisite:** Completion of MATH 140 or Eligibility  
of Math 150 (*AVC Assessment test*).

*Advisory:* Eligibility for College Level Reading.  
(CSU, UC, AVC)

MATH 160 CALCULUS AND ANALYTIC  
GEOMETRY

**Prerequisite:** Completion of MATH 150.

*Advisory:* Eligibility for College Level Reading.  
(CSU, UC, AVC)

MATH 250 CALCULUS AND ANALYTIC  
GEOMETRY

**Prerequisite:** Completion of MATH 160.

*Advisory:* Eligibility for College Level Reading.  
(CSU, UC, AVC)

PHYS 110 GENERAL PHYSICS

**Prerequisite:** Completion of or concurrent enrollment  
in MATH 150.

*Advisory:* Completion of ENGL 101 and PSCI 101.  
(CSU, UC, AVC)

PHYS 120 GENERAL PHYSICS

**Prerequisite:** Completion of PHYS 110, and  
Completion of or concurrent enrollment in MATH 160.

*Advisory:* Eligibility for College Level Reading and  
ENGL 101. (CSU, UC, AVC)

PHYS 211 GENERAL PHYSICS

**Prerequisite:** Completion of PHYS 110, and  
Completion of or concurrent enrollment in MATH 160.

*Advisory:* Completion of MATH 220.  
(CSU, UC, AVC)

*Advisory:*

A condition of enrollment that a student is  
advised, but not required, to meet before or in  
conjunction with enrollment in a course or  
educational program.

**Prerequisite:**

A condition of enrollment that a student is  
required to meet in order to demonstrate current  
readiness for enrollment in a course or  
educational program. Prerequisites are enforced  
and a student will be blocked from enrolling or  
involuntarily dropped after enrolling if the  
student does not meet the stated prerequisite. A  
student must complete a course prerequisite  
with a satisfactory grade of A, B, C or P (pass).

Corequisite:

A condition of enrollment consisting of a course  
that a student is required to simultaneously take  
in order to enroll in another course. Corequisites  
are enforced and a student will be blocked from  
enrolling if the student does not meet the stated  
requisite.