



Mathematics Transfer Degree

18-19

COUNSELING CENTER ADVISING

AST-Associate Degree

Mathematics

- Every course in the major requires a minimum grade of "C"
- Maximum of 12 pass/no pass units accepted
- Minimum of 12 units must be completed at AVC (credit earned by examination will not be included in these 12 units)
- Refer to catalog or online website for course listings, descriptions, and suggested course sequence if available
- Certificate in Mathematics for Transfer (AS-T) is not available

Major Courses units

Required Core Courses: units

*MATH 150, Calculus and Analytic Geometry	5
MATH 160, Calculus and Analytic Geometry	4
MATH 250, Calculus and Analytic Geometry	4

Required Electives: Choose a minimum of 8 units from below with at least 4 units from A:

Required Electives A:

MATH 220, Linear Algebra	4
MATH 230, Introduction to Ordinary Differential Equations	4

Required Electives B:

*PHYS 110, General Physics	4
MATH 116, Introduction to Statistics Using R or MATH 115, Statistics	4

Units Required for Major 21

other requirements for degree

CSU GE Breath or IGETC Pattern	37-39
CSU Transferrable Elective Units to reach Degree Total	0-2

Minimum Units Required 60

*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 Mathematics for Transfer (AS-T in Mathematics) degree offers students a fundamental knowledge of Mathematics 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 Mathematics for Transfer (AS-T in Mathematics) 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 Mathematics for Transfer (AST) 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. A "P" (Pass) grade is not an acceptable grade for courses in the major.

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" 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

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

To contact the Math, 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 115 STATISTICS
Prerequisite: Completion of MATH 102.
Advisory: Eligibility for College Level Reading.
(CSU, UC, AVC)

MATH 116 INTRODUCTION TO
STATISTICS USING R
Prerequisite: Completion of MATH 102 (AVC Assessment).
Advisory: Eligibility for College Level Reading.
(CSU, UC, 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 220 LINEAR ALGEBRA
Prerequisite: Completion of MATH 160.
Advisory: Eligibility for College Level Reading.
(CSU, UC, AVC)

MATH 230 INTRODUCTION TO
ORDINARY DIFFERENTIAL EQUATIONS
Prerequisite: Completion of MATH 160.
Advisory: Completion of MATH 220 and MATH 250, and Eligibility for College Level
(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)

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.