

Cert. Programming Fundamentals 25-26



ABOUT THIS MAJOR

A student completing the Programming Fundamentals Certificate will gain a solid grounding in the basic principles that underlie Computer Science. This certificate provides both academic preparation for and a pathway to internships. When combined with further study, it will lead to the Computer Science Associate in Science Degree (AS), Computer Science Associate in Science for Transfer (AS-T), and/or transfer. This certificate is intended to be completed at the beginning of a student's course of study, while they are at the freshman level. For more information, visit [the Math and Science division](#).

TO EARN A Certificate A STUDENT MUST COMPLETE THE FOLLOWING:

- [1] Completion of Major & Program Electives Courses
- [2] Minimum grade point average of 2.0
- [3] A C or better in all courses required for the major

CERT - Programming Fundamentals

[Total Units Required for the Major 15]

Programming Language: select ONE of the following program language groupings. (6 units)		
C/C++ Programming: CS 120 - programming and Algorithms in CS 130- Data Structures using C/C++		6
OR		
Java Programming: CS 121- Programming and Algorithms in Java CS 131-Data Structures using Java		6
OR		
Python Programming: CS 122- Programming and Algorithms in Python CS132- Data Structures using Python		6

Require Course, complete ALL the following: (9 units)		
MATH 150 - Calculus and Analytic Geometry		5
PHYS110 - General Physics		4

Recommended Pathway

Programming Fundamentals Certificate

The Recommended Plan of Study is determined by the discipline faculty
Take classes in **Summer** or **Intersession** if needed to complete your degree in a timely manner!

Fall/Spring: Max 19 units | Summer: Max 9 units | Intersession: Max 6 units

☒ Major

SEMESTER 1

Course Advisement	Units
<input checked="" type="checkbox"/> MATH 150 OR MATH 150H	5
<input checked="" type="checkbox"/> CS 120 or CS 121 or CS 122	3
Total Semester Units	8

SEMESTER 2

Course Advisement	Units
<input checked="" type="checkbox"/> CS 130 OR CS 131 OR CS 132	3
<input checked="" type="checkbox"/> PHYS 110	4
Total Semester Units	7
TOTAL UNITS	15

COUNSELING NOTE SECTION

Prerequisite: If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade to enroll in the next course. 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. Title 5, Section 55200(d)

Application for Graduation:

Antelope Valley College awards degrees three times annually following the Fall, Spring, and summer semesters. Students must apply for graduation to earn their degree or certificate. Applications are due by September 6 for spring/summer graduates and by February 14 for fall graduates.

AVC 25-26 CATALOG: [ACADEMIC POLICIES](#)

INFORMATION and RESOURCES

Tutoring Assistance	Career Center	AVC Student Health Services
Transfer Center	Office of Students with Disabilities	Palmdale Center
Basic Needs	Financial Aid	Counseling Division