



# Certificate - Geographic Information Systems 23-24

## Recommended Plan of Study - Counseling

All courses with a + sign indicate a pre-requisite or co-requisite

### Low-Unit Certificate of Achievement

Other than term designation, courses have not be assigned a term	Units
<b>GEOG 205, Introduction to GIS (pre-requisite for all other courses)</b>	3
<b>GEOG 220+, Data Acquisition and Management in GIS</b>	3
<b>GEOG 221+, Spatial Analysis in GIS</b>	3
<b>GEOG 222+, Cartography for GIS</b>	3
<b>GEOG 298C+, Special Studies in GIS</b>	3
<b>Total:</b>	<b>15</b>

Geographic Information Systems (GIS) is a computer-based tool used to map and analyze things that exist and happen on the surface of Earth. GIS technology integrates database operations with statistical analysis and presents this information visually using maps. GIS can be used to explain events, predict outcomes and plan for the future.

*Verify with published schedules or Contact the Division for scheduled offerings*

**Take Summer classes if needed to complete the program in a timely manner.**

**The state requires all students to have a Comprehensive Educational Plan. Make a counseling appointment as soon as enrollment is established on any term. Come by the Counseling Center or call. Online Counseling is available: <https://www.avc.edu/student-services/counseling>**

Certificate Required Courses:	Units
GEOG 205, Introduction to GIS	3
GEOG 220+, Data Acquisition and Management	3
GEOG 221+, Spatial Analysis	3
GEOG 222+, Cartography	3
GEOG 298C+, Special Studies in GIS	3
<b>Units Required for the Certificate:</b>	<b>15</b>

Other Requirements:
<ul style="list-style-type: none"> <li>• Minimum grade of "C" required on each course</li> <li>• Maximum of 12 pass/no-pass units accepted for the Degree, 6 units for a cert.</li> <li>• Refer to catalog or online website for course listings and descriptions</li> </ul>

**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 "AVC" 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.

**Residency:** Minimum of 12 units completed at AVC with a minimum of 9 of those units completed from the certificate/major. (credit earned by examination will not be included in these 12 units) Title 5, Section 54000:<http://ccr.oal.ca.gov>

**Transfer:** Students planning to continue studies at a four-year college or university after AVC should visit the Transfer Resource Center or the Counseling Center and consult with a counselor as soon as possible to develop a plan of studies. Additional preparation for the major 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)

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.

**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 co-requisite.