

GEOGRAPHIC INFORMATION SYSTEMS AND TECHNOLOGY – ASSOCIATE IN SCIENCE, CERTIFICATE OF ACHIEVEMENT

Top Code:

2206.10

The Geographic Information Systems and Technology program educates students in the skills needed to gather, manage, model, interpret, analyze, and display spatial data. This program uses a variety of mapping and data collection methods, and provides training in industry standards, cartographic techniques, and developing technologies. Students who complete this program are prepared for careers in Geographic Information Systems, with special skills in related industries including environmental consulting, drafting, and programming.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes

- Ability to conduct geospatial data entry, digitization and conversion, and geospatial data building, modeling, or analysis.
- Perform analysis of geospatial data to identify spatial relationships or display results of analyses, using maps, graphs, or tabular data.
- Effectively communicate through the design or preparation of graphic representations of Geographic Information Systems (GIS).
- Build and manage existing Geographic Information Systems (GIS) databases.

Requirements for the Certificate of Achievement

Code	Title	Units
GEOG 011	INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS	3
GEOG 012	MAP INTERPRETATION AND SPATIAL ANALYSIS	3
GEOG 113	DATA ACQUISITION AND MANAGEMENT	3
GEOG 114	CARTOGRAPHIC DESIGN	3

Required Electives

Choose 2 of the following (6 units)

GEOG 115	ENVIRONMENTAL ANALYSIS WITH GIS	3
CIS 012	INTRODUCTION TO PROGRAMMING USING PYTHON	3
DT 008A	INTRODUCTION TO DIGITAL DESIGN AND FABRICATION	3
ENGR 001A	SURVEYING	3

TOTAL UNITS 18

Recommended Electives

Code	Title	Units
GEOG 030	FIELD STUDIES AND METHODS IN GEOGRAPHY	1
BIT 106	BUSINESS SOFTWARE – INTRODUCTION TO MICROSOFT OFFICE SYSTEM	3

General Education Requirements for the Associate in Science Degree

- General Information (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/>)
- PCC Local Gen Ed (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#pcclocaltext>)
- CSU Breadth (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#csubreadthtext>)
- IGETC (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#igetctext>)