Geographic Information Systems Certificate

This program roadmap represents one possible pathway to complete the program. ***Please see a counselor*** to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability. For counseling appointments call 916.608.6510.

Total Units: 7-10

First Year

Semester 1 — 7-10 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
GEOG 331 Exploring Maps and Geographic Technologies	3		F, S
GEOG 334 Introduction to GIS Software Applications	3		F, S
Geography Elective *	1-4		F, S

A minimum of 1 unit from the following:

GEOG 300: Physical Geography: Exploring Earth's Environmental Systems (3 units)

GEOG 301: Physical Geography Laboratory (1 units)

GEOG 390: Field Studies in Geography (1 - 4 units)

GEOG 391: Field Studies in Geography: Mountain Landscapes (1 - 4 units)

GEOG 392: Field Studies in Geography: Coastal Landscapes (1 - 4 units)

GEOG 393: Field Studies in Geography: Arid Landscapes (1 - 4 units)

GEOG 394: Field Studies in Geography: Volcanic Landscapes (1 - 4 units)

CISC 300: Computer Familiarization (1 units)

CISC 310: Introduction to Computer Information Science (3 units)

CISP 360: Introduction to Structured Programming (4 units)

CISP 370: Beginning Visual Basic (4 units)

CISP 400: Object Oriented Programming with C++ (4 units)

CISP 407: Programming in Python (4 units)

CISP 401: Object Oriented Programming with Java (4 units)

CISP 430: Data Structures (4)

Notes

- A Geographic Information System (GIS) is an assemblage of computers, software, and workforce personnel collecting, managing, analyzing and displaying spatial data. GIS is used to make informed decisions regarding an array of disciplines including Marketing, Forestry, Hazard Analysis, Landuse Planning, Business, Watershed Management, and Anthropology. This interdisciplinary certificate provides the theoretical and technical skills necessary to begin using GIS in a wide variety of applications. Skills obtained include GIS software application, GPS use, spatial data analysis, data management, programming and cartography.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.