

Geographic Information Systems (GIS) Certificate

PART TIME

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.

Catalog: 2025-26

Total Units: 28

Start Term: Spring

First Year

Semester 1 (Spring)

6 Units

CAT.	COURSE	UNIT	PREREQUISITES
Req	GEOG 330 Introduction to Geographic Information Systems	3	
Req	GEOG 334 Introduction to GIS Software Applications	3	

Semester 2 (Fall)

6 Units

CAT.	COURSE	UNIT	PREREQUISITES
Req	GEOG 340 Cartographic Design for GIS	3	GEOG 330
Req	GEOG 360 Database Design and Management in GIS	3	GEOG 330

Second Year

Semester 3 (Spring)

9 Units

CAT.	COURSE	UNIT	PREREQUISITES
Req	GEOG 342 Introduction to Remote Sensing and Digital Image Processing	3	GEOG 330
Req	GEOG 344 Spatial Analysis and Modeling in GIS	3	GEOG 330
RE	GEOG 362 Advanced Database Design and Management in GIS	3	GEOG 360

Semester 4 (Fall)

7 Units

CAT.	COURSE	UNIT	PREREQUISITES
Req	GEOG 350 Data Acquisition in GIS	3	GEOG 330
RE	GEOG 385 Introduction to Web Based GIS Application Development	3	GEOG 330
Req	GEOG 498 Work Experience in Geography	1	

EXPLANATION OF CATEGORIES

CAREER PATH

Career Options:

We prepare our students for careers as GIS Specialists, Technicians, and Analysts. Many students enter the program with expertise in a different field, such as biology, geology, public health, or archaeology, and augment their expertise with GIS skills learned in our program.

Our graduates work primarily for government agencies including the Cities of Sacramento, Roseville, and Folsom; State of California agencies including Fish and Wildlife, Water Resources, and Department of Health; county agencies including the Counties of Sacramento, Yolo, and El Dorado; federal agencies including Environmental Protection, Geological Survey, and National Parks; and public safety agencies including Fire, Police, and Emergency Services. Other employers include engineering, archaeological, and consulting firms.

Scheduling Notes:

- All in-person classes begin at 6:00 PM, except GEOG 330 which is offered at 6:00 PM and 1:00 PM.
- GEOG 350, 360, and 385 are offered in the fall.
- GEOG 342 and 362 are offered in the spring.

Other Notes:

 An internship (GEOG 498) is required as it opens up potential employment opportunities.
 Students can earn at least 1 unit for related paid or unpaid work experience including volunteer and internship positions through GEOG

EXPLANATION OF CATEGORIES			
Req	Required Core	A course that is required for this program	
RE	Restricted Elective	A course selected from a list of elective courses specified for this program in the course list in the catalog, which can be replaced with another course from the same list	

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498. See the Work Experience websi te for more information.