

# CERTIFICATE IN GEOGRAPHIC INFORMATION SYSTEMS

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Units Required for Certificate: 12

## Program Description:

The Certificate in Geographic Information Systems (GIS) is designed to equip students with the technical skills and knowledge needed to collect, manage, analyze, and interpret geographic data. This program provides a foundational understanding of GIS technologies and their applications across various industries, including urban planning, environmental-based sciences, public health, business analytics, engineering, transportation, agriculture, disaster management, public works, energy, and consulting. Through hands-on learning, students will develop proficiency in using industry-standard GIS software and tools to visualize and solve spatial problems.

Open to all degree-seeking students at Sacramento State University.

To receive the Certificate in Geographic Information Systems, students must:

- be working towards a degree at Sacramento State
- achieve a minimum 2.5 cumulative GPA in certificate program courses:

Code	Title	Units
Required Courses		
GEOG 109	Geographic Information Systems	3
GEOG 155	GIS Data Acquisition and Management	3
Electives (choose two)		6
GEOG 105	Cartography	
GEOG 107	Remote Sensing	
GEOG 110	Spatial Analysis in GIS	
GEOG 150	Programming for GIS	
GEOG 151	Programming for GIS II	
GEOG 163	Applied GIS	
<b>Total Units</b>		<b>12</b>