

CERTIFICATE OF UNDERGRADUATE STUDY  
IN  
GEOGRAPHIC INFORMATION SYSTEMS AND SCIENCE (GIS)

**Program Guide**

Zachary Christman  
Coordinator  
Robinson Hall  
856.256.4810  
christmanz@rowan.edu

Geospatial and mapping technologies have been important throughout history but have become indispensable during the past several decades. This CUGS in GIS provides a foundation in GIS education and geospatial science to a wide range of students, and provides a means of enhancing the resumes of students of various majors with a GIS certificate indicating to employers their readiness to perform and support GIS activities. This Certificate of Undergraduate Study (CUG) in GIS is intended to expose students in disciplines such as business, engineering, political science, psychology, communication, the natural sciences, and education to key concepts, practices, and techniques in GIS and their application to geospatial/environmental problems. We believe that engineering students in particular will benefit from this CUGS since they are often interested gaining GIS credentials but are unable to complete all 18 credits necessary for the GIS minor.

**Certificate of Undergraduate Study in GIS 13 s.h.**  
Requirements

	Course Number	Course Title	Semester Taken	S.H.
1	GEOG16.160 –	Intro. to Mapping and GIS		3 s.h.
2	GEOG16.260 –	Foundations of GIS		4 s.h.
3	<i>Geospatial Bank Course #1</i>			
4	<i>Geospatial Bank Course #2</i>			

In consultation with an advisor, students choose **any two** of the department’s Geospatial Bank courses (6 s.h.) which include: GEOG16.261 (Cartography); GEOG16.350 (Quantitative Methods in Geography); GEOG16.360 (Applications of GIS); GEOG16.361 (Geovisualization); GEOG16.365 (Geospatial Measurement and Environmental Modeling); GEOG16.370 (Remote Sensing / Air Photo Interpretation); GEOG16.375 (Drones, Planes, and Satellites); GEOG16.462 (Web Mapping and GIS Services)

To be awarded the CUGS in GIS, students must complete all courses required for the CUGS in GIS with at least a 2.0 average. This CUGS is restricted to students not enrolled in the BS GIS and GIS Minor programs.