

# GEOGRAPHIC INFORMATION SYSTEMS AND GEOMATICS GRADUATE CERTIFICATE

---

## Introduction

The graduate certificate in geographic information systems (GIS) is designed to supplement knowledge needed in the professional work environment or as a way to see if a graduate degree in GIS is a good fit. Students may earn this certificate without formal admission to a master's degree program in engineering if they take these classes as a non-degree student.

## Program Requirements

The GIS graduate certificate requires the successful completion of four core GIS classes with a grade of B- or better; any prerequisites for those individual classes are also required.

Code	Title	Hours
<b>Complete four of the following:</b>		<b>12</b>
<i>Any prerequisites for those individual classes are also required</i>		
CVEN 5381	Introduction to Geographic Information Systems	
CVEN 5382	Geospatial Data Development	
CVEN 5384	GIS Project Management	
CVEN 5385	GIS Relational Database Systems	
CVEN 5387	Advanced Remote Sensing	
CVEN 5390	Interactive Web Mapping GIS	
CVEN 5391	Introduction to Geomatics	
CVEN 5392	Unmanned Aerial Systems	
CVEN 5395	GPS/GNSS	
CVEN 5396	HDS/LiDAR Tools & Data Analyses	
CVEN 5397	Unmanned Aerial Systems Data processing	

For more information about geomatics and geographic information systems at CU Denver, visit our research page (<https://engineering.ucdenver.edu/civil-engineering/research-specialty-areas/geomatics-gis/>).

For general information contact the Department of Civil Engineering at [civilengineering@ucdenver.edu](mailto:civilengineering@ucdenver.edu).