GEOSPATIAL, REMOTE SENSING, CERTIFICATE

(Code 140-603)

The Department of Geography and Anthropology offers a Geospatial Certificate Program with Four Options: Geospatial Certificate, Geospatial Certificate in Geographic Information Systems, Geospatial Certificate in Remote Sensing, and Geospatial Certificate in Mapping. The goals of the Certificate are:

1. to provide students with the fundamentals and a working knowledge of the core geospatial technology skills, specifically geographic information systems, remote sensing, field data collection (GPS and surveying) and spatial thinking,
2. to give students the option to specialize by choosing an emphasis in one of three different areas: Geographic Information Systems, Remote Sensing, or Computer Mapping, and
3. to expose students to ethical issues involved with the use of geospatial technology.

While the Certificate is targeted primarily at professionals in the workforce who want to further their education by adding this credential onto their existing degrees, it provides current UW-Eau Claire students an opportunity to add a specific high demand set of skills and associated credentials onto their already marketable liberal arts degree from UW-Eau Claire. For advising, see Professor Ryan Weichelt (Geography and Anthropology).

Code	Title	Credits
Eighteen semester credits, including:		
GEOG 335	Geographic Information Systems I	3
GEOG 336	Geospatial Field Methods	3
GEOG 337	Geographic Information Systems II	3
GEOG 338	Remote Sensing of the Environment	3
GEOG 438	Remote Sensing Data Analytics	3
Electives, select one of the following:		
GEOG 358	LiDAR Analysis & Applications	
GEOG 435	Geographic Information Systems III	

Note: Students can only receive one of the three specialized certificates, due to the potential overlap between the electives. Students cannot pursue the Geography Major and any of the Geospatial Certificates to meet graduation requirements for completing a first and second degree program.

Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Demonstrate the skills necessary to perform standard geospatial tasks.
- Demonstrate proficiency in industry standard software and using industry standard field equipment.
- Apply the skills of preprocessing optical remotely sensed data, customizing or developing a suitable algorithm to extract biophysical and/ or sociocultural information from the data, and utilizing the information in a given geospatial problem.