GEOGRAPHIC INFORMATION SYSTEMS (GIS) MINOR

The Minor in Geographic Information Systems offers students an intensive, interdisciplinary course of study in the field of Geographic Information Systems (GIS) technology. Candidates must take four required courses and choose three additional courses from a list of options. All students study a core of computer mapping and spatial analysis basics and then focus on their own application area (e.g. wildlife biology, wetlands, programming, cartographic design). An internship or similar participation in a 'real world' GIS project is a required component of the minor program.

This minor is open to all majors.

Grade Requirements: a grade ≥B- must be earned in each course for the credits to count toward the minor.

Required Introductory Course—choose at least one of the following		
GEOS 321	GEOGRAPHIC INFORMATION SYSTEMS I: SPATIAL ANALYSIS FOR SOCIAL SCIENCES	5
or GEOS 323	GEOGRAPHIC INFORMATION SYSTEMS I: SPATIAL ANALYSIS FOR ENVIRONMENTAL SCIENCES	
Required		
GEOS 428	GEOGRAPHIC INFORMATION SYSTEMS II	5
GEOS 429	GEOGRAPHIC INFORMATION SYSTEMS III	5
GEOS 493	GIS PORTFOLIO	2
Electives—choose three of the following		**13-15**
GEOS 329	REMOTE SENSING WITH SATELLITE IMAGERY	
GEOS 333	REMOTE SENSING WITH LIDAR	
GEOS 335	REMOTE SENSING WITH DRONES	
GEOS 420	DIGITAL GEOARCHAEOLOGY	
GEOS 426	CRITICAL GIS	
GEOS 427	DESKTOP MAPPING	
GEOS 449	ADVANCED SPATIAL ANALYSIS	
GEOS 458	DIGITAL CULTURAL RESOURCE MANAGEMENT	
GEOS 471	GIS PROGRAMMING	
Total Credits		**30-32**

Students who earn a Geographic Information Systems Minor from EWU should be able to:

- demonstrate mastery of foundational concepts of geographic information science;
- demonstrate mastery of foundational concepts of the social context of geographic information;
- communicate geographic information through well-designed maps;
- critically evaluate the quality and accuracy of spatial data;
- work in teams;
- show demonstrated proficiency with GIS software.