

GEOGRAPHIC INFORMATION SYSTEMS, CERTIFICATE

The Certificate 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 classes and choose three additional classes from a list of options for a total of 24–30 credits. 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 certificate program. This certificate program is open to all majors and post-degree students. In order to qualify for admission to the GIS Certificate Program, full-time EWU students must hold a GPA ≥ 3.0 and be entering or past their junior year, or obtain special permission from the certificate program advisor. Post-degree continuing education students who did not graduate from their previous school with at least a GPA > 3.0 will be admitted on a probationary basis. A grade ≥ 3.0 must be earned in each course for it to count toward the Certificate.

Required Certificate Courses

GEOG 328	GEOGRAPHIC INFO SYSTEMS I	5
GEOG 428	GEOGRAPHIC INFORMATION SYSTEMS II	5
GEOG 429	GEOGRAPHIC INFORMATION SYSTEMS III	5
GEOG 493	GIS PORTFOLIO	2

Electives

GIS Speciality—choose one

GEOG 427	DESKTOP MAPPING	3
or GEOG 499	DIRECTED STUDY	

Interdisciplinary—choose one

GEOG 323	GIS FOR ENVIRONMENTAL SCIENCES (PLAN 496 may substituted for the Interdisciplinary requirement on approval of the GIS Certificate Program advisor.)	3
or PLAN 496	EXPERIMENTAL COURSE	

Application Area 3-5

Student selects appropriate (non-GIS) course with approval of certificate advisor, to complement chosen application area focus, e.g. Soils, Wetlands, Visual Basic, Global Issues.

Total Credits 24-30

Student Learning Outcomes—students will

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