## **GEOGRAPHIC INFORMATION SYSTEMS MINOR**

The minor in geographic information systems prepares students for current modern trends in geospatial technology, computerized mapping, digital image processing, and spatial analysis. The GIS minor requires one course in computer science (COMPUTER 1130), one course in Statistics (MATH 1830), and three courses in GIS and remote sensing. Six credits of electives will complete the minor, to be chosen from courses in remote sensing, advanced computer programming for GIS, physical geography, and independent research or an internship in GIS.

The GIS minor incorporates dynamic changes in current advances in spatial sciences and technology. The students that complete a GIS minor significantly enhance their employment opportunities, especially in environmental consultation agencies, mapping technology industries, surveying, geology, biology, criminal justice and other social sciences, and business. In the current job market, a great many employers are looking for candidates that combine GIS expertise with a wide variety of other majors.

Course	Title	Credits
Required Core Courses		
ENVSS 3230	Geographic Information Systems	4
ENVSS 4330	Advanced Geographic Information Systems	4
ENVSS 3520	Remote Sensing of the Environment	3
ENVSS 4040	Python for GIS	3
COMPUTER 1130	Introduction to Programming	3
MATH 1830	Elementary Statistics	3
Electives		
Select 6 credits of the following:		6
ENVSS 2230	Cartography	
ENVSS 3340	Biogeography	
ENVSS 3720	Advanced Remote Sensing	
ENVSS 4120	Special Topics in Environment and Society	
ENVSS 3950	Guided Research	
or ENVSS 4660	Cooperative Field Experience	

Total Credits 26