



Major in Geographic Information Science



Geographic information science (GISci) involves the theory and methodology behind capturing, storing, analyzing and communicating digital information about the Earth and phenomena distributed on or near its surface. Geographic Information Science involves both “on” and “with” spatial technologies including geographic information systems (GIS), remote sensing, and the global positioning system (GPS). The objective of the program is to provide a comprehensive GISci degree that balances work in the theoretical aspects of GIS, the technical side of the discipline, and the applications domain. This program also offers the integration of practical GIS skills with scientific, technological and contextual knowledge to better prepare students for current and future demands in the job market. The GIS program is designed for traditional and non-traditional students to improve and update their GIS knowledge and then enhance their GIS career. As a participant in the program you will: work through a varied curriculum related to the diverse aspects of the geographic information processing environment, and conduct applied projects designed to provide practical and professional experience. To complete this major 43 credit hours are required.

For more information please visit our Department Website at <http://fp.uni.edu/geography>



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Required Courses: (28 credit hours)

970:010	Human Geography
970:026	Physical Geography (4 hour version)
970:061	Maps and Map Interpretation
970:163	Aerial Photo Interpretation and Photogrammetry
970:164	GIS 1: Introductory GIS
970:165	Thematic Cartography
970:173	Remote Sensing of the Environment
970:174	GIS 2: Advanced GIS
970:180	Senior Seminar

Statistics Requirement: (3 credit hours)

800:072	Introduction to Statistical Methods
980:080	Statistics for Social Research

Technical Electives: (6 credit hours)

810:030	Visual BASIC Programming
810:114	Database Systems
970:160	Spatial Data Analysis
970:175	Global Positioning System Field Survey Methods
970:183	Satellite Image Processing

Geography Electives: (6 credit hours)

970:114	Political Geography
970:117	Transportation Geography
970:119	Population Geography
970:121	Locational Analysis for Business
970:126	Geography of Soils
970:129	Rivers
970:137	Natural Hazards and Disasters
970:151	Historical Geography
970:168	Regional Analysis and Planning