GEOGRAPHIC INFORMATION SCIENCE MINOR

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Program Director: Keith Yearwood, Ph.D.

The minor program in Geographic Information Sciences is designed to give students the technical skills needed to acquire, manage and analyze geospatial data. Almost everything we do involves geospatial information such as deciding where to live and travel. Influenced by computer technology, the academic disciplines of geographic information science includes such areas as geospatial visualization, remote sensing, big geospatial data handling, mobile GIS, and web mapping among others, and has evolved dramatically in the past few decades. The fields of GIS-computer systems that manage and analyze different forms of digital geospatial data, and remote sensing-the science of obtaining geographic information from aircraft and satellites, have been growing at an extraordinary rate. Digital cartography has revolutionized traditional cartography to vastly improve map making and visualization of geographic information in a multimedia environment. Students in the minor program will receive extensive training in all of these exciting areas and join the next generation of geospatial scientists. These skills are in great demand in fields such as environmental, sustainable development, urban planning, governmental sectors, military intelligence, engineering, modeling, and computer science related fields.

REQUIREMENTS

- All credits for the minor must be taken in the Department of Geographical Sciences at the University of Maryland, College Park.
- All courses must be completed with a grade of "C" or better.
- No more than six credits are to be included in the minor and student's major, supporting courses, and college requirements.
- At least nine credits must be at the 300 or 400 level.
- Must complete 15 credits in geography

See the undergraduate advising office for more information: LeFrak Hall 2108, 301-405-4073.

Course	Title	Credits
Required Courses		
GEOG272	Introduction to Earth Observation Science	3
GEOG373	Geographic Information Systems	3
Two courses from the following:		6
GEOG416	Conceptualizing and Modeling Human-Environmental Interactions	
GEOG473	Geographic Information Systems and Spatial Analysis	
GEOG475	Geographic Visualization and Digital Mapping	
GEOG476		
GEOG498	Topical Investigations (GEOG498I Algorithms for Geospatial Computing)	
Other similar course		
GEOG306	Introduction to Quantitative Methods for the Geographical Environmental Sciences	3
or BIOM301	Introduction to Biometrics	
or BMGT230	Business Statistics	
or CCJS200	Statistics for Criminology and Criminal Justice	
or ECON321	Economic Statistics	
or GVPT422	Quantitative Political Analysis	
or INST314	Statistics for Information Science	
or JOUR405	Breaking News With Numbers: Statistics for Journalists	
or PSYC200	Statistical Methods in Psychology	
or QMMS251	Introduction to Educational Statistics	
or SOCY201	Introductory Statistics for Sociology	
Total Credits		**15**