## GEOGRAPHIC INFORMATION SYSTEMS, GRADUATE CERTIFICATE

The objectives of the graduate certificate in Geographic Information Science (GIS) offered through the Department of Geography are to provide students with a concentrated geography background focusing on geographic information techniques, to prepare students with technical skills in using GIS, and to qualify students for a wide range of GIS applications. It is possible for students to earn a graduate certificate in GIS while enrolled in another graduate program at the university. The Department of Geography is a member of the University Consortium for GIS (UCGIS), and the UN Global Geospatial Information Management Academic Network of Americas.

## **Admission Requirements**

Admission into the graduate certificate in GIS normally requires the applicant to have a GPA of 3.0 overall, 3.0 in the last 60 hours in a degree program, or 3.0 for a completed graduate degree program. Students that do not meet this requirement may be considered for admission if they hold a bachelor's degree and have two or more years of relevant work experience in a field that deals with geographic information, such as geography, natural resources, and land-use management, environmental analysis, regional and environmental planning, civil engineering, or business applications.

See the Admission Criteria section of this catalog for more information.

Certificate Requirements

The graduate certificate in GIS requires the completion of 20 credit hours, including 12 hours of core courses and 8 hours of electives.

Code and Title		Hours
Required Courses		12
GY 570	Special Studies Geog (Computer Mapping and Graphics)	
GY 520	Remote Sensing I	
GY 530	Intro Geographic Info Systems	
Elective Courses		8
GY 539	GIS Programming	
GY 576	Gis Practicum	
GY 535	Remote Sensing II	
GY 536	Adv Geographic Info Syst	
GY 537	GIS for Transportation	
GY 543	Location Science	
GY 516	Geostatistics Using R	
GY 588	Digital Terrain and Watershed	
Total Hours		20