Graduate Certificate in Geographic Information Systems

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A Geographic Information System (GIS) is a set of computer hardware and software used to organize, manipulate, and analyze maps and spatial data. GIS is a rapidly developing technology that can be applied to many areas of the natural sciences, social sciences, engineering, and planning.

The Graduate Certificate in Geographic Information Systems provides students with an interdisciplinary background in GIS. The program consists of graduate level courses in Geographic Information Systems and related subjects offered by the departments of Biology, Civil and Environmental Engineering, Computer Science, Earth and Environment, Global and Sociocultural Studies, Public Administration, and Statistics. This certificate program is open to degree-seeking students only.

For more information, contact the Program Director, Assefa Melesse: phone: (305) 348-6518; email: melessea@fiu.edu, or visit the GIS Center website: http://gis.fiu.edu.

Admission Requirements
Applicants must currently be enrolled in a Graduate Degree program at FIU and must exhibit basic proficiency with computers.

Prescribed Courses and Other Requirements
The certificate program will require 15 graduate level credits (5 courses) distributed as follows:

Required Courses: (One course from each of the following 3 categories)

1. Introduction to GIS
   CGN 5320  GIS Applications for Civil and
            Environmental Engineering
   GIS 5050  Environmental GIS

   Students who demonstrate prior GIS course work or substantial GIS work experience may substitute this requirement with 3 elective credits from the courses listed below with approval of the Program Director.

2. Intermediate/Advanced GIS
   CGN 6325  Advanced GIS for Civil and
            Environmental Engineering
   EVR 5044  Advanced GIS and Environmental Data
            Analysis
   GLY 5758  GIS and Spatial Analysis for Earth
            Sciences
   SYA 6356  GIS and Social Research
            or equivalent
3. Remote Sensing
GLY 5754 Applied Remote Sensing in Earth Sciences or equivalent

Electives: (6 credits out of the following)
CCJ 6079 Geospatial Crime Analysis
COP 6727 Advanced Database Systems
EVR 6268 Remote Sensing in Hydrology
EVR 7056 GIS Water Resources
EVR 7329 Watershed Analysis and Management
GIS 5620 Surveillance, Intelligence, and International Relations
GIS 5935 Topics in GIS
MET 5412 Remote Sensing in Meteorology
PCB 5328 Spatial Ecology
PAD 6710 IT and E-government
PAD 6717 GIS Applications for Urban Management or equivalent

or
Additional intermediate/advanced GIS courses under Category 2 Required Courses,
or
Other GIS-related courses approved by the Program Director in consultation with the Coordinating Committee. Up to 3 credits of a graduate level statistics or data analysis course may be counted towards the Certificate requirements with approval of the Program Director.