

**M.A. IN GEOGRAPHY WITH GEOGRAPHIC INFORMATION SYSTEMS
CONCENTRATION
CHICAGO STATE UNIVERSITY**

April 2008

According to the January 22, 2004, *Nature* magazine article, "Mapping Opportunities," the United States Department of Labor in 2004 identified geotechnology as one of the three most important emerging and evolving fields, along with nanotechnology and biotechnology. The article indicated that job opportunities in geotechnology were growing and diversifying as the technology proved its value in ever more areas across the public and private sectors. The term geotechnology, comprising the fields of Global Positioning System (GPS), Remote Sensing, Geographic Information Systems (GIS), and Cartography, is a technology of acquiring, managing, analyzing, and visualizing geospatial information for decision making purposes. At Chicago State University and many other institutions of higher education, a minor in Geographic Information Systems and certificate and degree programs in Geographic Information Systems/Science comprise courses in GPS, Remote Sensing, GIS, and Cartography.

A few years ago, Chicago State University was among the first few institutions in the United States to develop a Graduate Certificate program in this exciting and rapidly evolving technology/science. The Geography unit of the Department of Geography, Sociology, Economics, and Anthropology has recently developed three new additional undergraduate and graduate programs in GIS. These newly developed programs are **Undergraduate Minor in Geographic Information Systems (UM-GIS)**, **B.A. in Geography with Geographic Information Systems Concentration (BAG-GIS)**, and **M.A. in Geography with Geographic Information Concentration (MAG-GIS)**.

The M.A. in Geography with Geographic Information Systems Concentration (MAG-GIS) prepares students to become advanced GIS/Remote Sensing professionals or prepares them to continue on for a Ph.D. in these rapidly growing fields. Students seeking admission into this program are required to fulfill the general requirements for admission into graduate programs at Chicago State University, which includes attainment of a 3.0 GPA at the undergraduate level. Students who lack at least 3 hours of computer programming and 3 hours of introductory GIS may be required to make up these deficiencies. The requirements to complete the program are follows:

Graduate Geography Core (6 hours)

GEOG 5860: Geographic Inquiry (3)

GEOG 5880: Geographic Measurement Techniques (3)

Required Geographic Information Systems Courses (15 hours):

GEOG 5820: Environmental Remote Sensing (3)

GEOG 5830: Advanced GIS (3)

GEOG 5810: Cartographic Design and Visualization (3)

GEOG 5840: Digital Image Processing and Analysis (3)

GEOG 5850: GIS Applications (3)

Electives from the following chosen in consultation with the graduate advisor (6 hours)

GEOG 5500: Urban Geography (3)

GEOG 5520: Principles and Practices of Urban and Regional Planning (3)

GEOG 5530: Neighborhood Development (3)

GEOG 5540: Community Analysis (3)

GEOG 5841: GIS Database Development and Management (3)

GEOG 5842: GIS Programming and Customization (3)

GEOG 5851: GIS Internship (3)

Master's Thesis (6 hours):

GEOG 5991: Thesis I (proposal and data acquisition, 3 hours)

GEOG 5992: Thesis II (data analysis and write up, 3 hours)

Students with previous degrees/certificates in GIS seeking admission into the MAG-GIS program should consult with the graduate advisor about their program of study.

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