



For more information or an application contact:

Department of Geography
Binghamton University
State University of New York
4400 Vestal Parkway East
Binghamton, NY 13902

Telephone: 607-777-2755

Fax: 607-777-6456

Email: gis@binghamton.edu

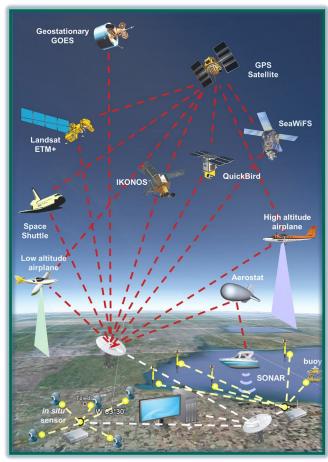
Web: http://binghamton.edu/geography/ http://facebook.com/BinghamtonGeography/



Department of Geography

MA Program in Geographic

Information Science (GIS)

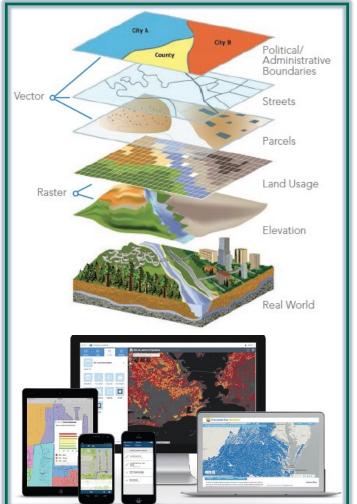




## MA Track in Geographic Information Science (GIScience)

GIScience is the scientific discipline that studies data structures and computational techniques to capture, represent, process, and analyze geographic information. It helps manage and process locations and characteristics of spatial features, such as roads and land parcels. It also allows for visual display and spatial analysis of demographic, economic and other data. GIS is a fast-growing area with a broad range of applications in government agencies, nonprofit organizations and for profit companies.

This MA track focuses on the tools and techniques used in spatial analysis in both physical and human geography. Among the essential components of this concentration are geographical data collection, cartography, GIS, spatial statistics, remote sensing and aerial photo interpretation. Students in this track will have the opportunity to examine a wide range of timely questions using the most recent techniques and approaches.



## **Core Required Courses:**

Geog 500 - Geographical Theory

Geog 502 \*- Introduction to GIS for Planners

Geog 503 - Programming in GIS

Geog 532 - Remote Sensing of the Environment

Geog 533 - Statistical Techniques for Geography

Geog 544 - GIS and Spatial Analysis

One course from Urban Planning Track

One course from Environmental/Sustainability Track

## **Elective Courses:**

Geog 505 - Raster GIS

Geog 536 - Land Use Analysis

Geog 545 - Advanced Geographical Analysis

Geog 546 - Environmental Hazards and Health

Geog 550 - Web GIS

Geog 555 - Advanced Remote Sensing

Geog 560 - Census Geography and GIS

Geog 566 - Advanced Spatial Statistics

Geog 576 - Advanced Environmental Analysis

Geog 577 - Retail Geography

Geog 581 - Special Topics in Geography

Geog 597 - Internship/Independent Study

Geog 599 - Thesis Research

\* Remedial course for 1st year students without GIS experience.

