

MASTERS OF SCIENCE IN GEOGRAPHIC INFORMATION SCIENCE



Earth, Environmental, and Geospatial Sciences (EEGS)

Geographic Information Science (GISc) is a fast growing computer technology and data field that is revolutionizing private and public sectors of the economy through powerful visualizations, dashboards, mapping, and analysis of spatial data. Geographic Information Systems (GIS) enable us to address and research critical issues with a spatial dimension such as climate change, disease occurrences, conservation of the environment, crime patterns, housing and real state, transportation and infrastructure, hazards and disasters, and emergency management.

- GISc is projected by the US Department of Labor to be one of the fastest-growing fields; it is difficult to imagine a field that has not already been impacted by GISc.
- Most of our students complete an internship to jumpstart their careers. Internship hosts include many local agencies, NASA, NOAA, and Columbia University, among others.
- Our graduates work at: US Census bureau, US EPA, NASA, US Forest Service, New York Police Department, NYC Office of Emergency Management, NYC Parks Department, and NYC Department of Transportation, among other places.
- Potential positions include: GIS Technician and Analyst, Data Scientist, Cartographer, Business Intelligence Analyst.

MS-GISc (40 Credits)

14 Credits in Required Courses:

GEP 505 Principles of GISc
GEP 621 Remote Sensing
GEP 630 Geostatistics and Spatial Analytical Concepts GEP 605 Special Topics in GISc

8 Credit Capstone Experience:

Traditional Master's Thesis Option

GEP 695 Thesis Research in GISc or

Professional Experience Option

GEP 690 Workshop in GISc Research and GEP

670 Internship in GISc

Courses may be substituted with departmental permission.

18 Credits from the following:

GEP 504 Basic Mapping Science
GEP 602 Biogeography and GISc
GEP 606 Raster Analysis
GEP 610 Spatial Analysis of Urban Health
GEP 620 Demography & Population Geography GISc
GEP 631 Advanced Remote Sensing
GEP 632 Environmental Health and GISc
GEP 635 Natural Hazards and Risk Analysis
GEP 640 Urban Geography and GISc GEP 645 Water Resources, Hydrology, and GISc
GEP 650 Regional Geography & Applied Mapping GEP 660 Geovisualization and Analytical Cartography GEP 662 Introduction to Programming for GISc
GEP 664 Spatial Database Management
GEP 675 Data Integration & Data Acquisition Methods
GEP 680 Emerging Issues and Methods in GISc
GEP 689 Methods Seminar in GISc
GEP 691 Independent Study in GISc

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