# MASTERS OF SCIENCE IN GEOGRAPHIC INFORMATION SCIENCE



# Earth, Environmental, and Geospatial Sciences (EEGS)

Geographic Information Science (GISc) is a fast growing computer technology field involving mapping and analysis of spatial data. Geographic Information Systems (GIS) enable us to assess and manage critical issues with a spatial dimension such as climate change, monitoring disease occurrences through dashboards, conservation of the environment, crime analysis, housing and real state, and emergency management.

- GISc is projected by the US Department of Labor to be one of the fastest-growing fields, and 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

#### 18 Credits to be chosen 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

#### 8 Credit Capstone Experience:

Traditional Master's Thesis Option GEP 695 Thesis Research in GISc or Professional Expirience Option GEP 690 Workshop in GISc Research and GEP 670 Intership in 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

Courses may be substituted with departmental permisison.

### For more information please contact:

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