The University of Texas at Dallas

School of Economic, Political and Policy Sciences

Master of Science in Geospatial Information Sciences

The MS in Geospatial Information Sciences is a professional program offered jointly by the School of Economic, Political and Policy Sciences and the School of Natural Sciences and Mathematics.

The program provides students a rigorous understanding of the technologies, quantitative techniques, models and theories used to acquire and manage spatially referenced information and to analyze spatial processes.

Program Description
The program focuses on the use of geographical information systems, which combine software and hardware capabilities for managing spatially referenced information. Students are provided with the concepts underlying GIS, the skills for implementing GIS projects and the ability to use GIS in pure or applied research in substantive areas.

Students must complete 36 credit hours to earn a Master of Science in Geospatial Information Sciences. This includes:

• 15 semester credit hours of required core
• 18 semester credit hours of prescribed elective
• 3 semester credit hours of a research project/thesis requirement

All students must achieve at least a 3.0 grade point average in all coursework to graduate. For complete admission and degree requirements, view the Graduate Catalog at catalog.utdallas.edu.

Career Opportunities
Graduates of the program can apply their skills in multiple areas including public sectors, such as policy analysis, smart cities, transportation planning, geospatial intelligence, emergency response, public health and environmental sustainability, as well as private sectors, such as marketing, site selection, logistics, driverless cars, insurance, real estate, internet of things and resource exploration.

 Marketable Skills
The Master of Science in Geospatial Information Science (GIS) program provides students with a solid understanding of the technologies, quantitative techniques, and models and theories of GIS, and the ability to apply the knowledge to support public and private sector organizations to address significant broad societal issues, and to enhance understanding of the human and natural environments.

• Students will be able to extract construct and process spatially referenced information by using global positioning systems, digital processing of remote sensing imagery, and address geocoding of socio-economic data, and to manage the data in a personal or enterprise geospatial database.
• Students will be able to create effective visual representations of geospatial data with online and/or offline visual analytic tools and platforms and be able to analyze geospatial data using spatial data analytics skills, spatial statistics methodologies, and spatio-temporal simulation models.
• Students will be able to automate geoprocessing procedures and build models through application programing with script languages or application programing languages.