Graduate Certificate in Remote Sensing

The School of Economic, Political and Policy Sciences (EPPS) offers a graduate certificate in Remote Sensing. The American Society for Photogrammetry and Remote Sensing (1997) defines remote sensing as the art, science, and technology of obtaining reliable information about physical objects and the environment through the process of recording, measuring and interpreting imagery and digital representations of energy patterns derived from non-contact sensor systems. Remote sensing provides a reliable and cost-effective means of studying the Earth's surface for urban planning, natural resources management and environment protection, and a wide variety of other fields. Government and non-government organizations continuously seek qualified professionals to use remote sensing for a wide range of applications.

Certificate Requirements

Requirements for admission to the certificate program are the same as a non-degree seeking graduate student. The Remote Sensing Certificate requires the completion of five (5) graduate courses (15 semester credit hours). No more than six (6) semester credit hours from other institutions may be applied to the required 15 semester credit hours. The courses taken for this certificate will apply for Master of Science in Geospatial Information Sciences degree if the student meets the conditions for full admission as a graduate student to the Master's program. Courses taken as part of the certificate can be taken in conjunction with the Graduate Certificates in Geographic Information Systems and Geospatial Intelligence Certificate must be completed within a 3-year time period with a minimum GPA of 3.0.

Required Core Courses – Six (6) Semester Credit Hours:

- GISC 6325 (GEOS 5325) Remote Sensing Fundamentals
- GISC 7365 (GEOS 5326) Advanced Remote Sensing

Elective Courses – Nine (9) Semester Credit Hours from the following:

- GISC 5322 (GEOS 5322) GPS Satellite Surveying Techniques
- GISC 5324 (GEOS 5324) 3D Capture and Ground Lidar
- GISC 6301 GISC Data Analysis Fundamentals
- GISC 6317 GIS Programming Fundamentals
- GISC 6321 Spatial Data Science
- GISC 6323 Machine Learning for Socio-Economic and Geo-Reference Data
- GISC 6363 Internet Mapping and Information Processing
- GISC 6375 Spatial Optimization
- GISC 6379 Special Topics in Geographic Information Systems
- GISC 6381 (GEOS 6381) Geographic Information Systems Fundamentals
- GISC 6384 (GEOS 6384) Advanced Geographic Information Systems
- GISC 6385 (GEOS 6385) GIS Theories, Model and Issues
- GISC 6388 Advanced GIS Programming
- GISC 7310 Advanced GIS Data Analysis
- GISC 7360 GIS Pattern Analysis
- GISC 7361 Spatial Statistics
- GISC 7387 GIS Research Design

For more information contact:

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