

## Graduate Certificate in Geographic Information Systems (GIS)

The School of Economic, Political and Policy Sciences (EPPS) offers a graduate certificate in Geographic Information Systems (GIS) for both novice and experienced professionals. Geographic Information Systems is a field devoted to the acquisition, storage, management, analysis, and visualization of spatially referenced data. GIS gives you the ability to integrate and analyze spatial and non-spatial information for mapping, planning, and decision-making.

## **Certificate Requirements**

Requirements for admission to the certificate program are the same as a non-degree seeking graduate student. The Geographic Information Systems Certificate requires 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 Geospatial Intelligence and Remote Sensing. 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 6381 Geographic Information Systems Fundamentals
- GISC 6384 Advanced Geographic Information Systems

## 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 GIS Data Analysis Fundamentals
- GISC 6317 GIS Programming Fundamentals
- GISC 6321 Spatial Data Science
- GISC 6323 Machine Learning for Socio-Economic and Geo-Referenced Data
- GISC 6325 (GEOS 5325) Remote Sensing Fundamentals
- GISC 6363 Internet Mapping and Information Processing
- GISC 6375 Spatial Organization
- GISC 6379 Special Topics in GIS
- 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 7365 Advanced Remote Sensing

For more information contact:

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