GEOGRAPHIC INFORMATION SCIENCE GRADUATE CERTIFICATE

Banner Code: SC-CERG-GISC

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This graduate certificate prepares students for employment in federal, state, and local government positions that require GIS skills. The certificate has been found suitable for the needs of business and industry, including those corporations that serve as contractors to governments in the United States and overseas.

The Geographic Information Science Graduate Certificate may be pursued on a full-or part-time basis.

Admissions & Policies

Admissions

University-wide admissions policies can be found in the Graduate Admissions Policies (http://catalog.gmu.edu/admissions/graduate-policies/) section of this catalog.

All applicants should have a working knowledge of, or prior education or training in, computer technology. Knowledge of GIS, remote sensing technology, and cartography are preferred. Students from any discipline are welcome to apply.

Applicants to this certificate program must submit a current résumé. GRE scores and letters of recommendation are not required but will strengthen an application, if available.

To apply for this program, please complete the George Mason University Admissions Application (https://www2.gmu.edu/admissions-aid/apply-now/).

Policies

For policies governing all graduate certificates, see AP.6.8 Requirements for Graduate Certificates (http://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-8)

Premium Tuition Rate

This professional certificate program charges students at a differential (premium) tuition rate. This rate applies to all students who enroll in this certificate program, regardless of in-state or out-of-state status. The differential tuition will be used to fund continuing improvements in the departmental computational facilities used to support the certificate program.

Requirements

Certificate Requirements

Total credits: 15

This certificate may be pursued on a full-or part-time basis.

Students should refer to the Admissions & Policies tab for specific policies related to this program.

Core Courses

Code	Title	Credits
GGS 550	Geospatial Science Fundamentals	3
GGS 553	Geographic Information Systems	3
Select 3 credits from the following:		3
GGS 563	Advanced Geographic Information Systems	
GGS 650	Introduction to GIS Algorithms and Programming	
GGS 653	GIS Analysis and Application	
GGS 692	Web-based Geographic Information Systems	
Total Credits		9

Electives

Code	Title	Credits
Select an additional 6 credits from the following:		6
GGS 505	Transportation Geography	
GGS 531	Land-Use Modeling Techniques and Applications	
GGS 551	Cartographic Design	
GGS 560	Quantitative Methods	
GGS 563	Advanced Geographic Information Systems	
GGS 579	Remote Sensing	
GGS 631	Spatial Agent-Based Models of Human-Environment Interactions	
GGS 650	Introduction to GIS Algorithms and Programming	
GGS 653	GIS Analysis and Application	
GGS 655	Geovisualization	
GGS 658	Terrain Mapping	
GGS 664	Spatial Data Structures	
GGS 675	Location Science	
GGS 692	Web-based Geographic Information Systems	
GGS 773	Interoperability of Geographic Information Systems	

GGS 787	Scientific Data Mining for Geoinformatics	
Total Credits		6