GEOSPATIAL INTELLIGENCE GRADUATE CERTIFICATE

Banner Code: SC-CERG-GI

Graduate Advising

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Fairfax Campus

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This graduate certificate is for persons employed in geospatial intelligence applications (i.e., federal agency and/ or corporate or association personnel) or those interested in entering this field. Our program offers fundamental knowledge on geospatial intelligence and the ability to apply this knowledge to a diverse range of constantly evolving geospatial intelligence situations. This graduate certificate has been accredited by the United States Geospatial Intelligence Foundation.

The majority of courses required for this certificate are also available online. For more information visit Mason Online (http://masononline.gmu.edu/).

The graduate certificate in geospatial intelligence may be pursued on a part-time or full-time basis, and qualifies for Title IV Federal Financial Aid.

Admissions & Policies

Admissions

University-wide admissions policies can be found in the Graduate Admissions Policies (https://catalog.gmu.edu/admissions/graduate-policies/) section of this catalog. International students and students having earned international degrees should also refer to Admission of International Students (https://catalog.gmu.edu/admissions/international-students/) for additional requirements.

Eligibility

Applicants to this graduate certificate program should hold a BA or BS degree in a discipline related to the certificate's theme from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency or international equivalent. Applicants are expected to have undergraduate backgrounds that include courses in differential and integral calculus, and they should possess working knowledge of a computer programming language. Depending upon the background of the individual student, the coordinator may recommend remedial or preparatory courses tailored to the student's needs.

Application Requirements

To apply for this certificate, prospective students should submit the George Mason University Admissions Application (https://www2.gmu.edu/admissions-aid/apply-now/) and its required supplemental documentation.

GRE scores and letters of recommendation are not required but will considerably strengthen an application, if available.

Policies

For policies governing all graduate certificates, see AP.6 Graduate Policies (https://catalog.gmu.edu/policies/academic/graduate-policies/).

Transferring Previous Graduate Credit into this Certificate

Students may transfer no more than 3 credits into this certificate with the approval of the academic director.

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: 18

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 certificate.

Core Courses

The mandatory core courses reflect the three key science emphases of this program: geospatial image analysis, spatial analysis, and information technology:

Code	Title	Credits
GGS 553	Geographic Information Systems	3
GGS 680	Earth Image Processing	3
GGS 684	Selected Topics in Geospatial Intelligence	3
GGS 685	Capstone Course in Geoinformatics	3
Select one from the following:		3
GGS 650	Introduction to GIS Algorithms and Programming	
GGS 664	Spatial Data Structures	
GGS 692	Web-based Geographic Information Systems	
Total Credits		**15**

Elective

Code	Title	Credits
Select one additional elective course from the following:		3
GGS 563	Advanced Geographic Information Systems	
GGS 579	Remote Sensing	

GGS 631	Spatial Agent-Based Models of Human-Environment Interactions	
GGS 632	Spatial Modeling for Public Health	
GGS 650	Introduction to GIS Algorithms and Programming	
GGS 658	Terrain Mapping	
GGS 664	Spatial Data Structures	
GGS 675	Location Science	
GGS 681	Social Media Analysis	
GGS 692	Web-based Geographic Information Systems	
GGS 740	Hyperspectral Imaging Systems	
GGS 787	Scientific Data Mining for Geoinformatics	
GGS 788	Deep Learning for Geoinformation	
Total Credits		**3**