

GEOSPATIAL INTELLIGENCE GRADUATE CERTIFICATE

Banner Code: SC-CERG-GI

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This graduate certificate program 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 program 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. For more information about program graduation rates, the median debt of students who completed the program, and other important information, please visit our disclosure information page (https://irr2.gmu.edu/gedt/Geospatial_Intelligence/Gedt.html).

Admissions & Policies

Admissions

University-wide admissions policies can be found in the Graduate Admissions Policies section of this catalog.

Applicants to this graduate certificate program should hold a BA or BS degree in a discipline related to the certificate's theme from a regionally-accredited university with a minimum GPA of 3.00. To apply, prospective students should complete the George Mason University Admissions Application (<https://www2.gmu.edu/admissions-aid/apply-now>). In addition, applicants to this certificate program must submit a current résumé, GRE scores. Letters of recommendation are not required but will considerably strengthen an application, if available. TOEFL scores are required of all international applicants.

Applicants should have undergraduate backgrounds that include courses in differential and integral calculus, and they should possess working knowledge of a computer programming language. Depending on the background of the individual student, the coordinator may recommend remedial or preparatory courses tailored to the student's needs.

Policies

For policies governing all graduate programs, see AP.6 Graduate Policies.

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.

Transfer of Credit

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

Requirements

Certificate Requirements

Total credits: 18

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

Core Courses

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

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|--------------------------------|--|---|
| GG5 553 | Geographic Information Systems | 3 |
| GG5 680 | Earth Image Processing | 3 |
| GG5 684 | Selected Topics in Geospatial Intelligence | 3 |
| GG5 685 | Capstone Course in Geoinformatics | 3 |
| Select one from the following: | | 3 |
| GG5 650 | Introduction to GIS Algorithms and Programming | |
| GG5 664 | Spatial Data Structures | |
| GG5 692 | Web-based Geographic Information Systems | |

Total Credits 15

Elective

Select one additional elective course from the following: 3

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|---------|--|--|
| GG5 563 | Advanced Geographic Information Systems | |
| GG5 579 | Remote Sensing | |
| GG5 631 | Spatial Agent-Based Models of Human-Environment Interactions | |
| GG5 650 | Introduction to GIS Algorithms and Programming | |
| GG5 658 | Terrain Mapping | |
| GG5 664 | Spatial Data Structures | |
| GG5 671 | Algorithms and Modeling in GIS | |
| GG5 675 | Location Science | |
| GG5 692 | Web-based Geographic Information Systems | |
| GG5 740 | Hyperspectral Imaging Systems | |

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|---------------|---|---|
| GGIS 772 | Cloud Geographic Information Systems | |
| GGIS 787 | Scientific Data Mining for Geoinformatics | |
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| Total Credits | | 3 |