

Program Change Request

Date Submitted: 02/23/24 4:18 pm

Viewing: **SC-CERG-GI : Geospatial Intelligence Graduate Certificate**

Last approved: 05/08/23 11:16 am

Last edit: 03/08/24 4:17 pm

Changes proposed by: jbazaz

Catalog Pages
Using this Program
[Geospatial Intelligence Graduate Certificate](#)

Are you completing this form on someone else's behalf?

No

Effective Catalog: 2024-2025

Program Level: Graduate

Program Type: Certificate

Degree Type: Graduate Certificate

Title:
Geospatial Intelligence Graduate Certificate

Banner Title: Geointelligence Certificate

Registrar/OAPI Use Only – SCHEV Status Approved

Registrar’s Office Use Only – Program Start Term

Registrar/OAPI Use Only – SCHEV Letter

Registrar/OAPI Use Only – SACSCOC Status

In Workflow

1. GGS Chair

2. SC Curriculum Committee

3. SC Assistant Dean

4. Assoc Provost- Graduate

5. Registrar-Programs

Approval Path

1. 03/15/24 11:33 am
Nathan Burtch
(nburtch): Approved for GGS Chair

History

1. Nov 8, 2017 by
clmig-jwehrheim

2. Feb 15, 2018 by
rzachari

3. Feb 8, 2019 by
Dieter Pfoser
(dpfoser)

4. Feb 23, 2021 by
jriemen

5. Jan 29, 2022 by
Nathan Burtch
(nburtch)

6. May 8, 2023 by Tory
Sarro (vsarro)

Concentration(s):

**Registrar/IRR Use
Only –
Concentration CIP
Code**

College/School: College of Science

**Department /
Academic Unit:** Geography & Geoinformation Science

**Jointly Owned
Program?** No

Justification

What: Referring applicants to central admissions language and removing extraneous wording.

Why: To make the program more adaptable to changes in university policies.

What: Adding new courses to electives

Why: These two new courses are applicable as electives in this certificate

Catalog Published Information

**Total Credits
Required:** Total credits: 18

Registrar's Office Use Only - Program Code:
SC-CERG-GI

**Registrar/IRR Use
Only – Program CIP
Code**

**Admission
Requirements:**

Admissions

University-wide admissions policies can be found in the [Graduate Admissions Policies](#) section of this catalog. [International students and students having earned international degrees should also refer to Admission of 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 ~~on~~ the background of the individual student, the coordinator may recommend remedial or preparatory courses tailored to the student's needs.

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

Requirements

To apply for this certificate, ~~apply~~, prospective students should submit complete the George Mason University Admissions Application and its required supplemental documentation. ~~Application.~~

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

Program-Specific
Policies:

Policies

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

Transferring Previous Graduate ~~Transfer of~~ Credit into this Certificate

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

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.

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

Degree Requirements:

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. ~~program.~~

Core Courses

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

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

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

**Retroactive
Requirements
Updates:**

Plan of Study:

Program Outcomes

Additional Program Information

This information is required by the Office of Accreditation and Program Integrity.

**Courses offered via
distance (if
applicable):**

**Indicate whether
students are able
to pursue on a:** Both Full and Part-time basis

What is the primary delivery format for the program?

Both Face-to-Face and Distance

Does any portion of this program occur off-campus?

No

Are you working with a vendor / other collaborators to offer your program?

No

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

No

Are you adding or removing a licensure component?

No

Additional SCHEV & SACSCOC Information

Is this change a simple retitling of an existing program, with no other changes, to any existing program content, curriculum requirements, etc?

No

Does this change represent a repackaging of content in an existing approved degree/certificate program at the same instructional level (i.e., baccalaureate, master's, or doctoral)?

No

Percentage of total credits containing new course content. ("New course content" is defined by SACSCOC as content that is not currently included in an existing approved degree/certificate program at the same instructional level. Do not exclude gen ed credits in calculations for undergraduate programs.)

0%-24%

Does this change include the addition of a distance education or face-to-face method of delivery for this program?

No

Does this change include the addition of a course/credit-based competency-based education delivery option?

No

Will any additional equipment/facilities be needed?

No

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Additional library/learning resources needed?

No

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? No

Does this program cover material which crosses into another department?

No

Additional Attachments

Reviewer Comments

Additional Comments

Is this course required of all students in this degree program?

%wi_required.eshtml%

Key: 209