

Program Change Request

Date Submitted: 10/03/21 5:23 pm

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

Graduate Certificate

Last approved: 02/23/21 4:56 pm

Last edit: 10/03/21 5:23 pm

Changes proposed by: nburtch

Catalog Pages

Using this Program

[Geospatial Intelligence Graduate Certificate](#)

2022-2023

Rationale for

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

No

Requester:

Effective Catalog: 2022-2023

Program Level: Graduate

Program Type: Certificate

Degree Type: Graduate Certificate

Title:

Geospatial Intelligence Graduate Certificate

Banner Title: Geointelligence Certificate

Is this a retitling of an existing

Existing Program

Registrar/OAPI Use Only – SCHEV Status Approved

In Workflow

1. GGS Chair

2. SC Curriculum Committee

3. SC Associate Dean

4. SC CAT Editor

5. Assoc Provost-Graduate

6. Registrar-Programs

Approval Path

1. 10/07/21 12:04 pm
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
Johanna Riemen
(jriemen)

**Registrar's Office
Use Only –
Program Start Term**

**Registrar/OAPI Use
Only – SCHEV
Letter**

**Registrar/OAPI Use
Only – SACSCOC
Status**

Concentration(s):

INTO Major(s):

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

College/School: College of Science

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

**Jointly Owned
Program?** No

Participating

Participating

Justification

What: Removing the GRE requirement for application

Why: GRE removal will put this certificate in line with our other graduate certificates. As well, we are moving to strike GRE requirements from our Master's degrees so requiring a GRE for this certificate would be quite out-of-step with our other programs.

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. 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 with a minimum GPA of 3.00. ~~To apply, prospective students should complete the George Mason University Admissions Application.~~ In addition, applicants to this certificate program must submit a current ~~résumé. résumé, and GRE scores.~~ **GRE scores and 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.

To apply, prospective students should complete the [George Mason University Admissions Application](#).

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**Program-Specific
Policies:**

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.

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 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 650	Introduction to GIS Algorithms and Programming	
GGS 658	Terrain Mapping	
GGS 664	Spatial Data Structures	
GGS 671	Algorithms and Modeling in GIS	
GGS 675	Location Science	
GGS 681	Social Media Analysis	
GGS 692	Web-based Geographic Information Systems	
GGS 740	Hyperspectral Imaging Systems	
GGS 772	Cloud Geographic Information Systems	
GGS 787	Scientific Data Mining for Geoinformatics	
Total Credits		3

**Retroactive
Requirements
Updates:**

Plan of Study:

**Honors
Information:**

**Accelerated
Description/Dual
Degree
Description:**

**INTO-Mason
Requirements:**

**College
Requirements &
Policies:**

**Department /
Academic Unit
Requirements &
Policies:**

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

Off-campus details:

Are you working with a vendor / other collaborators to offer your program?
No

Please explain:

Related Departments

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

No

Please explain:

Are you adding or removing a licensure component?

No

Please explain:

Additional SCHEV & SACSCOC Information

Are you changing the total number of credits required for this program?

No

Are you changing the delivery format in any way (e.g adding an online option)?

No

Are you adding/removing a licensure option which was approved by SCHEV?

No

Will any portion of this program be offered at an off-campus location?

No

What off-campus location(s)? List all

**What percentage of credits toward this program are offered at the off-campus location(s)?
Please list percentages by site (i.e. 15% at Site A, 35% at Site B etc.)**

Will this program change affect any specialized accreditation?

No

Is the content of the new program closely related to that of an existing approved program?

No

Which existing approved program(s)?

Is this new program considered to be "advancing the degree level of a currently approved program" (i.e. existing content is at lower degree level, new content is at the higher degree level)?

No

Which existing approved program(s)?

Is this new program considered to be "lowering the degree level of a currently approved program" (i.e. existing content is at higher degree level, new content is at the lower degree level)?

No

Which existing approved program(s)?

Does this change represent a repackaging of content in an existing approved degree/certificate program?

No

Which existing approved program(s)?

Percentage of total credits containing new course content, excluding gen ed courses for undergraduate program: ("New content" means content that is not currently included in an existing approved degree/certificate program.) Please choose a percentage (i.e. 0%-100%)

less than 25%

Are the total credits for the program increasing or decreasing by more than 3 credits?

No

Will any additional equipment/facilities be needed?

No

Description of institutional impact:

Will any additional faculty be required?

No

Description of institutional impact:

Will any additional financial resources be needed?

No

Description of institutional impact:

Will any additional library/learning resources needed?

No

Description of institutional impact:

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? No

Green Leaf

Definition

Sustainability-focused academic programs require at least one green leaf course. Either that course is itself sustainability-focused or else the program requires a set of sustainability-related courses with aggregated

Relationship to

Existing Courses

Relationship to

Existing Programs

List sustainability-focused courses currently required in the degree

Sustainability-related academic programs either require at least one sustainability-related course or else offer any green leaf course as an option or elective *

List sustainability-related courses currently required in the degree

Does this program cover material which crosses into another department?

No

Impacted

Departments

Additional

Attachments

SCHEV Proposal

Executive Summary

Reviewer

Comments

Additional
Comments

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

%wi_required.eshtml%

Attached
Document

Key: 209