

# 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: 10/30/21 11:32 pm

Changes proposed by: nburtch

### Catalog Pages

#### Using this Program

[Geospatial Intelligence Graduate Certificate](#)

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

No

**Effective Catalog:** 2022-2023

**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 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
2. 10/22/21 11:09 am  
Gregory Craft (gcraft): Approved for SC Curriculum Committee
3. 10/26/21 1:10 pm  
Jennifer Bazaz (jbazaz): Approved for SC Associate Dean
4. 10/26/21 1:34 pm  
Jennifer Bazaz (jbazaz): Rollback to GGS Chair for SC CAT Editor
5. 11/04/21 12:13 pm  
Nathan Burtch (nburtch): Approved for GGS Chair

**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: Removing the GRE requirement for application and mention of TOEFL scores

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. TOEFL scores are already covered via the link for University-wide admissions policies, so it's inclusion is unnecessary here.

**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)

**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. Applicants are expected to ~~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.**

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

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

~~.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.~~

### 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:

<a href="#">GGS 553</a>	Geographic Information Systems	3
<a href="#">GGS 680</a>	Earth Image Processing	3
<a href="#">GGS 684</a>	Selected Topics in Geospatial Intelligence	3
<a href="#">GGS 685</a>	Capstone Course in Geoinformatics	3
Select one from the following:		3
<a href="#">GGS 650</a>	Introduction to GIS Algorithms and Programming	

<a href="#">GGS 664</a>	Spatial Data Structures
<a href="#">GGS 692</a>	Web-based Geographic Information Systems

Total Credits

15

## Elective

---

Select one additional elective course from the following:

3

<a href="#">GGS 563</a>	Advanced Geographic Information Systems
<a href="#">GGS 579</a>	Remote Sensing
<a href="#">GGS 631</a>	Spatial Agent-Based Models of Human-Environment Interactions
<a href="#">GGS 650</a>	Introduction to GIS Algorithms and Programming
<a href="#">GGS 658</a>	Terrain Mapping
<a href="#">GGS 664</a>	Spatial Data Structures
<a href="#">GGS 671</a>	Algorithms and Modeling in GIS
<a href="#">GGS 675</a>	Location Science
<a href="#">GGS 681</a>	Social Media Analysis
<a href="#">GGS 692</a>	Web-based Geographic Information Systems
<a href="#">GGS 740</a>	Hyperspectral Imaging Systems
<a href="#">GGS 772</a>	Cloud Geographic Information Systems
<a href="#">GGS 787</a>	Scientific Data Mining for Geoinformatics

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**

---

**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

**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

**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

**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

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

No

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

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Will any 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**

**Jennifer Bazaz Gettys (jbazaz) (10/26/21 1:34 pm):** Rollback: To review the TOEFL language requirement statement.

**Additional Comments**

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

%wi\_required.eshtml%

Key: 209