

# Program Change Request

Date Submitted: 11/12/25 1:44 pm

## Viewing: **SC-CERG-GISC : Geographic Information Science Graduate Certificate**

Last approved: 05/13/25 3:59 pm

Last edit: 11/12/25 1:44 pm

Changes proposed by: nburtch

**Catalog Pages Using this Program** [Geographic Information Science Graduate Certificate](#)

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

No

**Effective Catalog:** 2026-2027

**Program Level:** Graduate

**Program Type:** Certificate

**Degree Type:** Graduate Certificate

**Title:** Geographic Information Science Graduate Certificate

**Banner Title:** GIS Certificate

### In Workflow

1. **GGS Chair**
2. **SC Curriculum Committee**
3. SC Assistant Dean
4. Assoc Provost-Graduate
5. Registrar-Programs

### Approval Path

1. 11/13/25 2:04 pm  
Nathan Burtch  
(nburtch): Approved for GGS Chair

### History

1. Nov 8, 2017 by clmig-jwehrheim
2. Mar 6, 2020 by pxiong
3. Dec 21, 2020 by Timothy Leslie (tleslie)
4. Jan 29, 2022 by Nathan Burtch

**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**

**Concentration(s):**

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

**College/School:**      College of Science

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

**Jointly Owned Program?**      No

**Is there an embedded degree as part of a program?**

**Justification**      What: GGS 550 was eliminated last year, so this is fixing the certificate to reflect that change.

Why: GGS 550's deletion left a gap in the certificate, so this will fix it for future Catalogs.

What: Remove GGS 505

- (nburtch)
- 5. May 8, 2023 by Tory Sarro (vsarro)
- 6. Apr 26, 2024 by Jennifer Bazaz Gettys (jbazaz)
- 7. May 13, 2025 by Christina Theodorou (ctheodo)

Why: GGS 505 does not contain sufficient GIS to work in the certificate.

## Catalog Published Information

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**Total Credits Required:** Total credits: 15

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

**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

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All applicants should have a working knowledge of, or prior education or training in, computer technology. Knowledge of GIS, remote sensing technology, and cartography are preferred. Students from any discipline are welcome to apply.

## Application Requirements

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To apply for this certificate, prospective students should submit the [George Mason University Admissions Application](#) and its required supplemental documentation.

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

**Program-Specific Policies:** **Policies**

For policies governing all graduate certificates, see [AP.6 Graduate Policies](#).

## Transferring Previous Graduate Credit into this Certificate

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Previously earned and relevant graduate credits may be eligible for transfer into this certificate; details can be found in the [Credit by Exam or Transfer](#) section of this catalog.

## Premium Tuition Rate

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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.

**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.

## Core Courses

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<a href="#">GGS 550</a>	<a href="#">Course GGS 550 Not Found</a>	3
<a href="#">GGS 553</a>	Geographic Information Systems	3
<del>Select 3 credits from the following:</del>		<del>3</del>
<u>Select 6 credits from the following:</u>		<u>6</u>
<a href="#">GGS 563</a>	Advanced Geographic Information Systems	
<a href="#">GGS 650</a>	Introduction to GIS Algorithms and Programming	
<a href="#">GGS 653</a>	GIS Analysis and Application	
<a href="#">GGS 692</a>	Web-based Geographic Information Systems	
Total Credits		9

## Electives

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Select an additional 6 credits from the following:

6

<del>GGG-505</del>	<del>Transportation Geography</del>
<u>GGG 531</u>	Land-Use Modeling Techniques and Applications
<u>GGG 551</u>	Cartographic Design
<u>GGG 560</u>	Quantitative Methods
<u>GGG 563</u>	Advanced Geographic Information Systems
<u>GGG 579</u>	Remote Sensing
<u>GGG 631</u>	Spatial Agent-Based Models of Human-Environment Interactions
<u>GGG 632</u>	Spatial Modeling for Public Health
<u>GGG 650</u>	Introduction to GIS Algorithms and Programming
<u>GGG 653</u>	GIS Analysis and Application
<u>GGG 655</u>	Geovisualization
<u>GGG 658</u>	Terrain Mapping
<u>GGG 664</u>	Spatial Data Structures
<u>GGG 675</u>	Location Science
<u>GGG 692</u>	Web-based Geographic Information Systems
<u>GGG 773</u>	Interoperability of Geographic Information Systems
<u>GGG 787</u>	Scientific Data Mining for Geoinformatics
<u>GGG 788</u>	Deep Learning for Geoinformation

Total Credits

6

### Retroactive Requirements

**Updates:**

**Plan of Study:**

**Program Outcomes**

**Additional Program Information**

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*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?** Face-to-Face Only

**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

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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

Have you reached out to the Libraries to determine whether there are adequate resources to support your program? If not, please email Meg Meiman, Associate University Librarian for Learning, Research, and Engagement at [mmeiman2@gmu.edu](mailto:mmeiman2@gmu.edu).

## OAPI Use Only – Determination of SACSCOC Impact

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### Comments or Notes

#### Green Leaf Program Designation

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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%