

# Program Change Request

Date Submitted: 02/01/26 10:03 pm

Viewing: **SC-MS-GEOI : Geoinformatics and Geospatial Intelligence, MS**

Last approved: 03/28/25 4:22 pm

Last edit: 03/06/26 11:18 am

Changes proposed by: nburtch

## Catalog Pages

### Using this Program

[Geoinformatics and Geospatial Intelligence, MS](#)

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

No

**Effective Catalog:** 2026-2027

**Program Level:** Graduate

**Program Type:** Master's

**Degree Type:** Master of Science

### Title:

Geoinformatics and Geospatial Intelligence, MS

**Banner Title:** Geoinformatics, MS

**Registrar/OAPI Use** Approved

**Only – SCHEV Status**

### Registrar's Office

**Use Only –**

**Program Start Term**

**Registrar/OAPI Use**

**Only – SCHEV**

**Letter**

**Registrar/OAPI Use**

**Only – SACSCOC**

**Status**

## In Workflow

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

## Approval Path

1. 02/05/26 10:50 am  
Nathan Burtch (nburtch): Approved for GGS Chair
2. 02/20/26 11:33 am  
Gregory Craft (gcraft): Approved for SC Curriculum Committee
3. 02/24/26 3:10 pm  
Jennifer Bazaz Gettys (jbazaz): Approved for SC Assistant Dean
4. 03/04/26 5:46 pm  
Kelly Schrum (kschrum): Rollback to SC Assistant Dean for Assoc Provost-Graduate
5. 03/06/26 12:12 pm  
Jennifer Bazaz Gettys (jbazaz): Rollback to SC Curriculum

**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**

Committee for SC Assistant Dean

**History**

1. Nov 9, 2017 by clmig-jwehrheim
2. Jan 23, 2019 by Dieter Pfoser (dpfoser)
3. Jan 29, 2021 by Nathan Burtch (nburtch)
4. Feb 23, 2021 by jriemen
5. Mar 11, 2021 by jriemen
6. Dec 2, 2021 by Nathan Burtch (nburtch)
7. May 17, 2022 by Tory Sarro (vsarro)
8. May 8, 2023 by Tory Sarro (vsarro)
9. May 16, 2023 by Tory Sarro (vsarro)
10. Apr 26, 2024 by Jennifer Bazaz Gettys (jbazaz)
11. Mar 28, 2025 by Nathan Burtch (nburtch)

What: Adding GGS 621 and GGS 662

Why: Newly created courses that will fit well in related elective buckets.

**Total Credits Required:** Total credits: 30

**Registrar's Office Use Only - Program Code:** SC-MS-GEOI

Registrar/IRR Use  
Only – Program CIP  
Code

Admission  
Requirements: **Admissions**

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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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In addition to the university-wide requirements, applicants for this master's should hold a BA or BS degree in a discipline related to the program's theme from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency or international equivalent, including courses in differential and integral calculus.

A working knowledge of a computer programming language is a plus.

When the background of an individual student does not meet the program's requirements, remedial or preparatory courses tailored to student's needs may be recommended.

## Application Requirements

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To apply for this program, prospective students should submit the [George Mason University Admissions Application](#) and its required supplemental documentation, two letters of recommendation, and a goals statement. GRE scores are not required for admission into this program, but are encouraged if the student is seeking internal funding.

Program-Specific  
Policies: **Policies**

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

## Transferring Previous Graduate Credit into this Program

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

## Secondary Program Options

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Students enrolled in this master's program have the option of adding a secondary graduate certificate program. Depending upon the secondary program chosen, many courses may be applicable to both the certificate and the master's. Before adding a secondary program, students are advised to carefully review [AP.6.8 Requirements for Graduate Certificates](#) and [AP.6.9 Requirements for Master's Degrees](#). Faculty advisors should be contacted for further guidance and for graduate certificate program suggestions.

**Degree Requirements:** Students should refer to the [Admissions & Policies](#) tab for specific policies related to this program.

## Core Courses

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<a href="#">GGS 553</a>	Geographic Information Systems	3
<a href="#">GGS 579</a>	Remote Sensing	3
<a href="#">GGS 664</a>	Spatial Data Structures	3
<a href="#">GGS 684</a>	Geospatial Intelligence Process Information	3
<a href="#">GGS 685</a>	Capstone Course in Geoinformatics	3
<a href="#">GGS 787</a>	Scientific Data Mining for Geoinformatics	3
Total Credits		18

## Thesis or Non-thesis Option

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Students choose the culminating experience of either a thesis or a project and a comprehensive exam (either must total 3 credits). The same graduate-level quality will be expected from either option: 3

### Thesis Option

[GGS 799](#) Thesis (3 credits)

### Non-thesis Option

[GGS 700](#) Comprehensive Exam (1 credit)

[GGS 798](#) Master's Research Project (2 credits)

Total Credits 3

## Electives

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Select three courses from the groupings below, with no more than two courses from a single group (courses must be taken from at least two groups): <sup>1</sup> 9

### Image Analysis:

[GGS 562](#) Photogrammetry

[GGS 621](#) [Remote Sensing of Natural Hazards](#)

[GGS 622](#) Drone Remote Sensing

[GGS 626](#) Physical Fundamentals of Remote Sensing

<a href="#">GGS 629</a>	Remote Sensing of the Environment and Earth System
<a href="#">GGS 662</a>	<a href="#">Agentic GeoAI</a>
<a href="#">GGS 680</a>	Earth Image Processing
<a href="#">GGS 740</a>	Hyperspectral Imaging Systems
<a href="#">GGS 760</a>	Advanced Topics in Remote Sensing
<a href="#">GGS 840</a>	Hyperspectral Imaging Applications
<b>Geographic Information Science:</b>	
<a href="#">GGS 563</a>	Advanced Geographic Information Systems
<a href="#">GGS 653</a>	GIS Analysis and Application
<a href="#">GGS 655</a>	Geovisualization
<a href="#">GGS 675</a>	Location Science
<a href="#">GGS 791</a>	Advanced Spatial Statistics
<b>Computational Geoinformatics:</b>	
<a href="#">GGS 631</a>	Spatial Agent-Based Models of Human-Environment Interactions
<a href="#">GGS 632</a>	Spatial Modeling for Public Health
<a href="#">GGS 650</a>	Introduction to GIS Algorithms and Programming
<a href="#">GGS 662</a>	<a href="#">Agentic GeoAI</a>
<a href="#">GGS 681</a>	Social Media Analysis
<a href="#">GGS 692</a>	Web-based Geographic Information Systems
<a href="#">GGS 754</a>	Earth Science Data and Advanced Data Analysis
<a href="#">GGS 773</a>	Interoperability of Geographic Information Systems
<a href="#">GGS 788</a>	Deep Learning for Geoinformation

Total Credits

9

<sup>1</sup>  
Course selections must be approved by the program coordinator.

**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):**

**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

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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**

## SCHEV Proposal

### Executive Summary

#### Reviewer

#### Comments

**Kelly Schrum (kschrum) (03/04/26 5:46 pm):** Rollback: Rolled back per request.

**Jennifer Bazaz Gettys (jbazaz) (03/06/26 12:12 pm):** Rollback: Further changes for COSCC to review.

#### Additional Comments

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

%wi\_required.eshtml%

Key: 212