

Program Change Request

Date Submitted: 02/01/26 10:07 pm

Viewing: **SC-CERG-RSIP : Remote Sensing and Image Processing Graduate Certificate**

Last approved: 05/13/25 5:16 pm

Last edit: 02/01/26 10:07 pm

Changes proposed by: nburtch

Catalog Pages
Using this Program
[Remote Sensing and Image Processing 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:
Remote Sensing and Image Processing Graduate Certificate

Banner Title: Remote Sensing Grad Cert

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. 02/05/26 10:50 am
Nathan Burtch
(nburtch): Approved for GGS Chair

History

- 1. Nov 8, 2017 by clmig-jwehrheim
- 2. Feb 23, 2021 by jriemen
- 3. Mar 8, 2021 by Tori Blocker (vblocke)
- 4. Jan 29, 2022 by Nathan Burtch (nburtch)
- 5. Apr 26, 2024 by Jennifer Bazaz Gettys (jbazaz)
- 6. May 13, 2025 by Christina Theodorou (ctheodo)

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: Add GGS 621, remove GGS 777

Why: Adding the new remote sensing of natural hazards course, removing the 700-level which is up for deletion.

Catalog Published Information

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

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

**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

This certificate focuses on the skills needed to take advantage of the enormous increase in the availability and use of remotely sensed data related to the Earth. Ideal candidates for this certificate are those who have a background

in Earth and environmental sciences and are working in or planning to enter into the field of remote sensing, Earth observing, or image processing.

Application Requirements

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

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

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

| | | |
|-------------------------|-------------------------------|---|
| GGS 579 | Remote Sensing | 3 |
| GGS 680 | Earth Image Processing | 3 |
| GGS 740 | Hyperspectral Imaging Systems | 3 |
| Total Credits | | 9 |

Electives

| | | |
|--|---|---|
| Select two electives from the following: | | 6 |
| GGS 621 | Remote Sensing of Natural Hazards | |
| GGS 622 | Drone Remote Sensing | |

| | |
|------------------------------------|--|
| GGS 626 | Physical Fundamentals of Remote Sensing |
| GGS 629 | Remote Sensing of the Environment and Earth System |
| GGS 754 | Earth Science Data and Advanced Data Analysis |
| GGS 760 | Advanced Topics in Remote Sensing |
| GGS 777 | Remote Sensing Natural Hazards |
| GGS 787 | Scientific Data Mining for Geoinformatics |
| GGS 840 | Hyperspectral Imaging Applications |

Total Credits

6

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?

Hybrid

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

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.

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: 210