Program Change Request

Date Submitted: 02/23/24 4:17 pm

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

Last approved: 05/08/23 11:16 am

Last edit: 03/08/24 4:21 pm

Changes proposed by: jbazaz

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

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

No

Effective Catalog: 2024-2025

Program Level: Graduate

Program Type: Certificate

Degree Type: Graduate Certificate

Title:
Geographic Information Science Graduate Certificate

Banner Title: GIS 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 Assistant Dean
4. Assoc Provost-Graduate
5. Registrar-Programs

Approval Path

1. 03/15/24 11:33 am
   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 (nburtch)
5. May 8, 2023 by Tory Sarro (vsarro)

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: Referring applicants to central admissions language and removing extraneous wording.

Why: To make the program more adaptable to changes in university policies.

What: Adds new courses to electives

Why: These newly proposed courses fit as applicable electives in this certificate.

Catalog Published Information

**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 <u>Graduate Admissions Policies</u> section of this catalog. <u>International students and students having earned international degrees should also refer to Admission of International Students for additional requirements.</u>

<u>Eligibility</u>

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.

<u>Application Requirements</u>

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

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

~~To apply for this program, please complete the George Mason University Admissions Application.~~

Program-Specific Policies:

Policies

For policies governing all graduate certificates, see AP.6 ~~AP.6.8 Requirements for Graduate~~ Policies. ~~Certificates~~

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. ~~program.~~

Core Courses

GGS 550	Geospatial Science Fundamentals	3
GGS 553	Geographic Information Systems	3
Select 3 credits from the following:		3
GGS 563	Advanced Geographic Information Systems	
GGS 650	Introduction to GIS Algorithms and Programming	
GGS 653	GIS Analysis and Application	
GGS 692	Web-based Geographic Information Systems	
Total Credits		9

Electives

Select an additional 6 credits from the following:		6
GGS 505	Transportation Geography	
GGS 531	Land-Use Modeling Techniques and Applications	

GGS 551Cartographic Design

GGS 560Quantitative Methods

GGS 563Advanced Geographic Information Systems

GGS 579Remote Sensing

GGS 631Spatial Agent-Based Models of Human-Environment Interactions

GGS 632Spatial Modeling for Public Health

GGS 650Introduction to GIS Algorithms and Programming

GGS 653GIS Analysis and Application

GGS 655Geovisualization

GGS 658Terrain Mapping

GGS 664Spatial Data Structures

GGS 675Location Science

GGS 692Web-based Geographic Information Systems

GGS 773Interoperability of Geographic Information Systems

GGS 787Scientific Data Mining for Geoinformatics

GGS 788Deep Learning for Geoinformation

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?   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

**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 instructiona
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

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.eschtml%

Key: 208