Program Change Request

Date Submitted: 11/02/21 2:12 pm

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

Last approved: 12/21/20 11:58 am

Last edit: 11/02/21 2:12 pm

Changes proposed by: nburtch

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

~~2022-2023~~

~~Rationale for~~

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

No

~~Requestor:~~

Effective Catalog:	2022-2023
Program Level:	Graduate
Program Type:	Certificate
Degree Type:	Graduate Certificate

Title:

Geographic Information Science Graduate Certificate

Banner Title: GIS Certificate

Is this a retitling of an existing

Existing Program

Registrar/OAPI Use Only – SCHEV Status	Approved

**Registrar's Office
Use Only –
Program Start Term**

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. 11/04/21 12:14 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)

Registrar/OAPI Use Only – SCHEV Letter

Registrar/OAPI Use Only – SACSCOC Status

Concentration(s):

INTO Major(s):

Registrar/IRR Use Only – Concentration CIP Code

College/School: College of Science

Department / Academic Unit: Geography & Geoinformation Science

Jointly Owned Program? No

Participating

Participating

Justification

What: Removing language of admissions requirements that is redundant to University-wide policies

Why: This allows the program to remain in step with the University policies even if those are changed at some point. The redundant language is unnecessary, and this section should be reserved for additional application materials wanted by the department.

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.

~~To apply for this program, please complete the George Mason University Admissions Application.Applicants to this certificate program must submit a currentrésumé.GRE scores and letters of recommendation are not required but will strengthen an application, ifavailable.TOEFL scores are required of all internationalapplicants.~~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.

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 <u>George Mason University Admissions Application</u>.

Program-Specific Policies:

Policies

For policies governing all graduate certificates, see <u>AP.6.8 Requirements for Graduate Certificates</u>

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 <u>Admissions & Policies</u> tab for specific policies related to this program.

Core Courses

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

Electives

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

GGS 551	Cartographic Design
GGS 560	Quantitative Methods
GGS 563	Advanced Geographic Information Systems
GGS 579	Remote Sensing
GGS 605	Systematic Applications of GIS
GGS 631	Spatial Agent-Based Models of Human-Environment Interactions
GGS 650	Introduction to GIS Algorithms and Programming
GGS 653	GIS Analysis and Application
GGS 655	Geovisualization
GGS 658	Terrain Mapping
GGS 664	Spatial Data Structures
GGS 671	Algorithms and Modeling in GIS
GGS 675	Location Science
GGS 692	Web-based Geographic Information Systems
GGS 772	Cloud Geographic Information Systems
GGS 773	Interoperability of Geographic Information Systems
GGS 787	Scientific Data Mining for Geoinformatics

Total Credits   6

Retroactive Requirements Updates:

Plan of Study:

Honors Information:

Accelerated Description/Dual Degree Description:

**INTO-Mason
Requirements:**

**College
Requirements &
Policies:**

**Department /
Academic Unit
Requirements &
Policies:**

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

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What is the primary delivery format for the program?   Face-to-Face Only

Does any portion of this program occur off-campus?

No

Off-campus details:

Are you working with a vendor / other collaborators to offer your program?

No

Please explain:

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

No

Please explain:

Are you adding or removing a licensure component?

No

Please explain:

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

What off-campus location(s)? List all

What percentage of credits toward this program are offered at the off-campus loca

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

Which existing approved program(s)?

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

Which existing approved program(s)?

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

Which existing approved program(s)?

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

No

Which existing approved program(s)?

Percentage of total credits containing new course content, excluding gen ed courses for undergraduate programs ("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/facilites be needed?

No

Description of institutional impact:

Will any additional faculty be required?

No

Description of institutional impact:

Will any additional financial resources be needed?

No

Description of institutional impact:

Will any additional library/learning resources needed?

No

Description of institutional impact:

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program?   No

Green Leaf

Sustainability-focused academic programs require at least one green leaf course. Either that course is itself sustainability-focused or else the program requires a set of sustainability-related courses with aggregated

Relationship to

Relationship to

List sustainability-focused courses currently required

Sustainability-related academic programs either require at least one sustainability-related

List sustainability-related courses currently required

Does this program cover material which crosses into another department?

No

Impacted

**Additional
Attachments**

SCHEV Proposal

Executive Summary

**Reviewer
Comments**

**Additional
Comments**

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

%wi_required.eschtml%

Attached

Key: 208