## Program Change Request

Date Submitted: 11/27/18 2:07 pm

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

Last approved: 11/09/17 10:03 am

Last edit: 11/27/18 2:16 pm

Changes proposed by: dpfoser

| | |
|---|---|
| **Catalog Pages Using this Program** | Geoinformatics and Geospatial Intelligence, MS |

**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. 11/27/18 2:17 pm Dieter Pfoser (dpfoser): Approved for GGS Chair

**History**

1. Nov 9, 2017 by clmig-jwehrheim

| | |
|---|---|
| **Are you completing this form on someone else's behalf?** | No |
| **Effective Catalog:** | 2019-2020 |
| **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 Only – SCHEV Status** | Approved |
| **Registrar's Office Use Only – Program Start Term** | |
| **Registrar/OAPI Use Only – SCHEV Letter** | |
| **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** | Adding GGS681 to electives. Adding GGS550 to electives. |

| | |
|---|---|
| **Total Credits Required:** | Total credits: 33 |
| **Registrar's Office Use Only - Program Code:** | SC-MS-GEOI |
| **Registrar/IRR Use Only – Program CIP Code** | |
| **Admission Requirements:** | |

## Admissions

University-wide admissions policies can be found in Graduate Admissions Policies.

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

**Eligibility and Application Requirements**

Applicants for this master's should hold a BA or BS degree in a discipline related to the program's theme from a regionally accredited university, with a minimum GPA of 3.00, 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. To apply, prospective students should complete the George Mason University Admissions Application. Official transcripts from each college and graduate institution attended, a current résumé, and a goals statement will be required.

Applicants will also need three letters of recommendation and an official report of scores obtained on the GRE-GEN. The GRE requirement for admission may be waived if the student holds a master's degree from a regionally accredited US institution. TOEFL scores are required of all international applicants.

**Program-Specific Policies:**

## Policies

For policies governing all graduate programs, see AP.6 Graduate Policies.

### Secondary Program Options

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

| Course List | | |
|---|---|---|
| Code | Title | Credits |
| GGS 550 | Geospatial Science Fundamentals | 3 |
| GGS 553 | Geographic Information Systems | 3 |
| GGS 664 | Spatial Data Structures | 3 |
| GGS 684 | Selected Topics in Geospatial Intelligence | 3 |
| GGS 685 | Capstone Course in Geoinformatics | 3 |
| GGS 680 | Earth Image Processing | 3 |
| GGS 787 | Scientific Data Mining for Geoinformatics | 3 |
| Total Credits | | 21 |

### Thesis

| Course List | | |
|---|---|---|
| Code | Title | Credits |
| GGS 799 | Thesis | 3 |
| Total Credits | | 3 |

### Electives

| Course List | | |
|---|---|---|
| Code | Title | Credits |
| Select three courses from the groups below (course selections must also be approved by the program coordinator), with no more than two from a single group (i.e. courses are taken from at least two groups): | | 9 |
| Image Analysis: | | |
| GGS 562 | Photogrammetry | |
| GGS 579 | Remote Sensing | |
| GGS 740 | Hyperspectral Imaging Systems | |
| GGS 760 | Advanced Topics in Remote Sensing | |
| GGS 840 | Hyperspectral Imaging Applications | |
| Geographic Information Science: | | |
| **GGS 550** | **Geospatial Science Fundamentals** | |
| GGS 563 | Advanced Geographic Information Systems | |
| GGS 653 | Geographic Information Analysis | |
| GGS 675 | Location Science | |
| GGS 772 | Cloud Geographic Information Systems | |
| GGS 791 | Advanced Spatial Statistics | |
| Computational Geoinformatics: | | |
| GGS 650 | Introduction to GIS Algorithms and Programming | |

| Code | Title | Credits |
|------|-------|---------|
| GGS 671 | Algorithms and Modeling in GIS | |
| **GGS 681** | **Social Media Analysis** | |
| GGS 692 | Web-based Geographic Information Systems | |
| GGS 754 | Earth Science Data and Advanced Data Analysis | |
| GGS 773 | Interoperability of Geographic Information Systems | |
| Total Credits | | 9 |

**Retroactive Requirements Updates:**

**Plan of Study:**

## Additional Program Information

*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

**Are you changing the total number of credits required for this program?**

**Are you changing the delivery format in any way (e.g adding an online option)?**

**Are you adding/removing a licensure option which was approved by SCHEV?**

**Will any portion of this program be offered at an off-campus location?**

**Are you adding significant new content areas to the program?**

**Will this program change affect any specialized accreditation?**

## Green Leaf Program Designation

**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**

**Additional Comments**

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

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Key: 212