

# **Program Approval Form**

For approval of new programs and deletions or modifications to an existing program.

Action Requested:  Create New (SCHEV appropriate Delete Existing Check all Title (SCHEV approvation (Choo X Degree Requirements Admission Standards Application Requirement Other Changes:	that apply) I required except (		es)	odify		B U M	(Check one): .A. B.S ndergraduate Certif I.A. X M.S h.D. Gra ther:	ficate	
College/School: College of Science Submitted by: Arie Croitoru				·			and Geoinformation Science  Email: acroitor@gmu.edu		
,	Please program	e note: For students on must be fully appropriately.	to be admitte	ed to a n		minor, cer	tificate or concentra	ation, the	
See Attached									
Fidedian									
Program Title: (Required) Title must identify subject matter. Do r include name of college/school/dept.	not Geoinforma	Existing  Geoinformatics and Geospatial Intelligence				New	/Modified		
Concentration(s):	None	None							
Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)	None	None							
Degree Requirements: Consult University Catalog for models, attach separate document if necessary using track changes for modifications		See Attached				See Attached			
Courses offered via distance (if applicable)	e:								
TOTAL CREDITS REQUIRED	):								
Approval Signatu				_					
Department		College/School		Date	Inter	, ,	Council Use Only	Date	
If this program may impact and for review by those units and obt								Jiate this proposal	
Unit Name Unit Approva		al Name Unit Approver's S		er's Sig	ignature		Date		
For Graduate Prog	rams Only								
Graduate Council Member		Provost Office				Grad	uate Council Appro	val Date	
For Registrar Office's Use Only: Received		BannerCatalog					revised 5/5/10		

# Proposed Program Modifications for MS in Geoinformatics and Geospatial Intelligence Fall 2015

The impetus for this change is adding a few electives to the offerings and cleaning up some categorical assignments. At the end we will have tighter thematic groupings along our elective subjects, and five options in each elective set.

## **Proposed Changes**

- 1) Add GGS 562 (Photogrammetry) and GGS 840 (Hyperspectral Applications) to Image Analysis elective list
- 2) Remove GGS 759 (Topics in Earth Systems Science) from the Image Analysis elective list

GGS 759 is an Earth Science course that does not fit well in the degree, while GGS 562 and 840 are part of the Image Analysis depth within the department.

- 3) Add GGS 563 and GGS 675 to GIS elective list
- 4) Remove GGS 631, GGS 671, and GGS 795 from the GIS elective list

GGS 563 and 675 are in courses our students have desired to incorporate into their degree programs (and we have done so through substitutions). This changes makes their inclusion official.

GGS 671 is included in both the GIS and Computation Geoinformatics listing. It need only be in one section, and it fits better in computational geoinformatics. GGS 795 is a regional analysis course that does not fit as a GIS elective. GGS 631 is no longer taught by our department.

5) Add GGS 692 to the Computation Geoinformatics listing.

Web GIS is a new, computationally-focused GIS course that merits inclusion here.

#### Approvals:

- 9/25/14: Approved by the departmental curriculum committee
- 10/14/14: Approved at GGS department meeting

### Current MS GEOI

#### Core Courses (24 credits):

7 courses + 3 credits of GGS 799 (Thesis)

Students select three courses from the groups below, with no more than two from a single group:

#### Image Analysis:

GGS 579 - Remote Sensing

GGS 740 - Hyperspectral Imaging Systems

GGS 759 - Topics in Earth Systems Science

GGS 760 - Advanced Remote Sensing Applications

#### Geographic Information Science (GIS):

GGS 631 - Spatial Agent-Based Models of Human-

**Environment Interactions** 

GGS 653 - Geographic Information Analysis

GGS 671 - Algorithms and Modeling in GIS

GGS 772 - Distributed Geographic Information

Systems

GGS 791 - Advanced Spatial Statistics

GGS 795 - Seminar in Regional Analysis

#### **Computational Geoinformatics:**

 $\mbox{GGS}$  650 - Introduction to GIS Algorithms and

Programming

GGS 671 - Algorithms and Modeling in GIS

GGS 754 - Earth Science Data and Advanced Data

Analysis

GGS 773 - Interoperability of Geographic Information

Systems

Total: 33 credits

# MS GEOI

# **After Proposed Modifications**

### Core Courses (24 credits):

7 courses + 3 credits of GGS 799 (Thesis)

Students select three courses from the groups below, with no more than two from a single group:

#### Image Analysis:

**GGS 562 - Photogrammetry** 

GGS 579 - Remote Sensing

GGS 740 - Hyperspectral Imaging Systems

GGS 760 - Advanced Remote Sensing Applications

**GGS 840 - Hyperspectral Imaging Applications** 

#### Geographic Information Science (GIS):

GGS 563 - Advanced GIS

GGS 653 - Geographic Information Analysis

**GGS 675 – Location Science** 

GGS 772 - Distributed Geographic Information

Systems

GGS 791 - Advanced Spatial Statistics

#### **Computational Geoinformatics:**

 $\mbox{GGS}$  650 - Introduction to GIS Algorithms and

**Programming** 

GGS 671 - Algorithms and Modeling in GIS

GGS 692 - Web GIS

GGS 754 - Earth Science Data and Advanced Data

**Analysis** 

GGS 773 - Interoperability of Geographic Information

Systems

Total: 33 credits