

# **Program Approval Form**

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

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College/School: College of Science					tment: 3-5428	Geograph		oinformation Science
Submitted by:  Effective Term:	Fall 2	2015	Please note: For students program must be fully appi		nitted to a			acroitor@gmu.edu  tificate or concentration, the n the University Catalog.
Justification: (atta	nch separate o	locumen	at if necessary)					
I			Existing		New/Modified			
Program Title: (Required) Title must identify subject matter. Do not include name of college/school/dept.			ospatial Intelligence					
Concentration(s):  Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)  Degree Requirements: Consult University Catalog for models, attach separate document if necessary using track changes for modifications		No	ne					
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Courses offered via distance: (if applicable)								
TOTAL CREDITS REQUIRED:								
Approval S	ignatuı	'es						
Department		Date	College/School		Date		vost's Offi disciplinary	ce Date Council Use Only
			it or is in collaboration with ecessary signatures prior to					partment must circulate this proposal n on this proposal.
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For Gradua	te Prog	rams	Only					
Graduate Council Member			Provost Office	Provost Office Graduate Council Approval Date				
For Registrar Office's Use Only: Received			Banner	BannerCatalog				

## Proposed Program Modifications for Graduate Certificate in Geospatial Intelligence Fall 2015

This proposal is seeking to expand somewhat on the elective options, as well as substitute the non-GGS course in the degree with departmental offerings.

1) Modify INFS 519 required to instead be ONE of GGS 650, 664, or 692

Since this degree was created, the department has built up its skill (as well as regular instruction) of a number of classes that fit the reasons we used the INFS 519 course. Now that we have the relevant expertise, we seek to rely on our own capacity rather than outside instruction.

2) Add GGS 563, 579, 671, 675 and 787 to the list of elective options

These courses are all available options in the MS in Geoinformatics that we wish to be available elective options for the certificate.

3) Remove GGS 747 from the Elective list

GGS 747 has been delisted by the department in previous terms.

#### **Approvals:**

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

#### Current GI Certificate

## **GI** Certificate

## **After Proposed Modifications**

Core: (15 credits)

GGS 553 (Geographic Information Systems)

GGS 680 (Earth Image Processing) GGS 684 (Selected Topics in GI)

GGS 685 (Capstone Course in Geoinformatics)

INFS 519 (Program Design and Data Structures)

Core: (15 credits)

GGS 553 (Geographic Information Systems)

GGS 680 (Earth Image Processing) GGS 684 (Selected Topics in GI)

GGS 685 (Capstone Course in Geoinformatics)

GGS 650, 664, OR 692 (Web GIS)

Elective Options (3 credits)

One more course from among the following

Elective Options (3 credits)

GGS 563 (Advanced GIS)

**GGS 579 (Remote Sensing)** 

GGS 631 (Spatial Agent-based Models)

GGS 650 (Intro to GIS Algorithms)

GGS 658 (Terrain Mapping)

GGS 664 (Spatial Data Structures)

GGS 671 (Algorithms and GIS)

**GGS 675 (Location Science)** 

**GGS 692** GGS 740

**GGS 631** 

**GGS 650** 

**GGS 658** 

**GGS 664** 

GGS 740 (Hyperspectral Imaging)

GGS 747 (Satellite Data Reception)

GGS 772 (Distributed GIS)

GGS 772

**GGS 787 (Scientific Data Mining)** 

18 credits

18 credits