



## New Combined Degree Program Request

UUPC Approval 3-29-21

UGPC Approval \_\_\_\_\_

UFS Approval \_\_\_\_\_

Banner Posted \_\_\_\_\_

Catalog \_\_\_\_\_

### New Combined Degree Program Request

Proposed Program: BS/MS Geosciences CIP: 40.0699 Effective Date (Term/Year): Fall / 2021 (e.g. Fall/2020)

Proposed Combined Program Information	Undergraduate	Graduate
Degree Level (e.g. B.A., R.S., M.A., M.S., etc.)	B.S.	M.S.
Program Name (e.g. Physics, Engineering, etc.)	Geosciences	Geosciences
College	Science	Science
Department	Geosciences	Geosciences
Program Description (provide a brief description of the program, including thesis or non-thesis option)	This accelerated, five-year program leads to both a B.S. in Geosciences with Geography focus and a M.S. in Geosciences (non-thesis) with a focus on Human Environment and Sustainable Science or Geographic Information Science. Students apply to the B.S./M.S. program in the second semester of their junior year and begin taking graduate courses in their senior year that would apply to both B.S. and M.S. degree. The combined degree program is 154 credits, 120 for the B.S. degree and 34 for the M.S. degree. Students complete the B.S. first, taking no more than 12 credits of graduate course work in their senior year, which will then be used to satisfy both degrees.	

### Curriculum Requirements

**GPA Requirements:** Departments must establish a minimum undergraduate GPA for students to be admitted to a combined program. *Note: Please attach explanation.*

Students must maintain a GPS of 3.0 in upper-division and graduate courses.

**List courses to be shared:** Up to twelve (12) credit hours of graduate courses (5000 level or above course work) may be shared between the graduate and undergraduate degree for a combined program. *Note: Please attach explanation:*

- Academic justification for shared credits and catalog language
- List the undergraduate course that will be replaced by graduate courses.

Faculty Submitting Request	Name	Signature	Email	Date
	James Gammack-Clark		jgammack@fau.edu	02/16/2021

### Approved by

Department Chair: \_\_\_\_\_

College Dean: \_\_\_\_\_

College Curriculum Chair: \_\_\_\_\_

UUPC Chair: \_\_\_\_\_

Undergraduate Studies Dean: \_\_\_\_\_  
(Note: Forward approved form to [UGPC@fau.edu](mailto:UGPC@fau.edu))

UGPC Chair: \_\_\_\_\_

UGC Chair: \_\_\_\_\_

Graduate College Dean: \_\_\_\_\_

UFS President: \_\_\_\_\_

Provost: \_\_\_\_\_

### Date

02/16/2021

3/24/2021

3-18-21

3-29-21

3-29-21

Aug 19, 2021

Aug 19, 2021

Aug 20, 2021

Email this form and syllabus to [mjenning@fau.edu](mailto:mjenning@fau.edu) seven business days before the UUPC meeting.

### Combined Bachelor of Science /Master of Science with Major in Geosciences: Geography Focus

This accelerated, five-year program leads to both a Bachelor of Science (B.S.) in Geosciences with Geography Focus and a Master of Science (M.S.) in Geosciences with a focus on Human Environment and Sustainable Science or Geographic Information Science. Students apply to the B.S./M.S. program in the second semester of their junior year and begin taking graduate courses in their senior year that would apply to both the B.S. and M.S. degree. The combined degree program is 154 credits, 120 for the undergraduate degree and 34 for the master's degree. Students complete the undergraduate degree first, taking no more than 12 credits of graduate coursework in their senior year, which will then be used to satisfy both degrees. Students must maintain a GPA of 3.0 in upper-division and graduate courses. Because of the accelerated nature of the program, students should take the GRE by the end of their first semester in their junior year.

#### Requirements and Eligibility

In addition to the University and Charles E. Schmidt College of Science requirements, students seeking a B.S./M.S. degree in Geosciences with Geography Focus must complete the following courses. The Geosciences core course (11 credits) are required for all students of the B.S. in Geosciences. Students selecting the Geography Focus then complete a Science core (7 credits), the Geography Focus core (24 credits), and Geosciences electives (30-31 credits) as noted below.

The graduate courses that would apply to both the B.S. and M.S. degree must be 5000 level or higher. Some courses, denoted with asterisks, have a 5000-level version that can be counted toward the graduate degree.

In addition to the Geosciences core courses noted above,

Geosciences Core Courses		
Introductory Statistics	STA 2023	3
General Chemistry 1 and Lab	CHM 2045, 2045L	4
Introduction to Mapping and GIS	GIS 3015C	3
Geosciences Honors Colloquium	GEO 4920	1
<b>Core Total</b>		<b>11</b>

Science Core Courses		
Biological Principles and Lab	BSC 1010/1010L	4 or
Biodiversity and Lab	BSC 1011/1011L	4
Methods of Calculus	MAC 2233	3
<b>Science Core Total</b>		<b>7</b>

Geography Focus Core Courses		
World Geography	GEA 2000	3
Introduction to Physical Geography	GEO 2200C	3
Weather, Climate and Climate Change	MET 2010	3
Quantitative Methods	GEO 4022	3
Principles of GIS*	GIS 4043C	3
Remote Sensing of the Environment*	GIS 4035C	3
Human-Environmental Interactions in South Florida	GEA 4275	3
Biogeography*	GEO 4300	3
<b>Core Total</b>		<b>24</b>

Geosciences Electives (select 30-31 credits from the courses below)
---

The Blue Planet	ESC 2000	3
Physical Geology/Evolution of the Earth	GLY 2010C	4
History of the Earth and Life	GLY 2100	3
Climate Change: Myths, Realities and Solutions	EVR 3114	3
Environmental Issues in Atmospheric and Earth Science	ESC 3704	3
Coastal and Marine Science	GLY 3730	3
Applications in GIS*	GIS 4048C	3
Photogrammetry and Aerial Photograph Interpretation	GIS 4021C	3
Digital Image Analysis*	GIS 4037C	3
Web GIS	GIS 4054C	3
Programming in GIS*	GIS 4102C	3
Hazards, Climate and People	EVR 4112	3
Geospatial Databases	GIS 4118	3
Geovisualization and GIS*	GIS 4138C	3
Mobile GIS & Drone Technology*	GIS 4140C	3
Spatial Data Analysis	GEO 4167C	3
Water Resources	GEO 4280C	3
Tourism and Commercial Recreation	GEO 4542	3
Urban Geography	GEO 4602	3
Transportation and Spatial Organization	GEO 4700	3
Geomorphology	GLY 4700C	3
Hydrogeology	GLY 4822	3
<b>Geosciences Electives Total</b>		<b>30-31</b>

<b>Additional Graduate-Level Courses for the Master's Degree</b> <i>(Up to 12 credits can be taken as a senior. All courses must be taken at the 5000 or 6000 level)</i>		
Human-Environmental Interactions	GEA 6277	3
Research in the Geosciences	GEO 6118	3
Geosciences Colloquium Series	GEO 6920	1
<b>Geosciences Focus - 12 credits</b> <i>Select 12 credits from one of the following areas of focus:</i>		
<b>Focus</b>	<b>Focus Courses</b>	
Human Environment and Sustainable Science	course prefixes EVR, GEA or GEO	
Geographic Information Science	course prefix GIS	
<b>Electives - 15 credits</b> <i>Select five courses (total of 15 credits) from the following course prefixes: EVR, GEA, GEO, GLY, GIS and no more than 3 credits of independent study (GEO 6908 or GLY 6908). May select up to 6 credits from cognate areas approved by the student's advisor. Any 5000 or 6000 level course within the College of Science.</i>		