GEOGRAPHICAL INFORMATION SYSTEMS (B.S.)

This program is offered through the College of Science (https:// catalog.uidaho.edu/colleges-related-units/science/). Students must earn a grade of C or better in all geography courses. Required course work includes the university requirements (see regulation J-3 (https:// catalog.uidaho.edu/general-requirements-academic-procedures/jgeneral-requirements-baccalaureate-degrees/)) and:

Code	Title	Hours		
ENGL 313	Business Writing	3		
or ENGL 317	Technical Writing II			
MATH 143	Precalculus I: Algebra (or higher)	3		
CS 212	Practical Python	3		
or CS 120	Computer Science I			
or CS 112	Computational Thinking and Problem Solving			
STAT 251	Statistical Methods	3		
GEOG 100	Introduction to Planet Earth	3		
GEOG 100L	Introduction to Planet Earth Lab	1		
GEOG 165	Human Geography	3		
or GEOG 200	World Cultures and Globalization			
GEOG 385	Foundations of GIS	3		
GEOG 390	Cartographic Design & Geovisualization	3		
GEOG 475	Intermediate GIS	3		
GEOG 479	GIS Programming	3		
GEOG 493	Senior Capstone in Geography	3		
Select 6 credits fr	om the following Geography courses:	6		
GEOG 330	Urban Geography			
GEOG 365	Geopolitics and Conflict			
GEOG 301	Meteorology			
GEOG 317	Tree Rings and Environmental Change			
GEOG 401	Climatology			
GEOG 410	Biogeography			
GEOG 430	Climate Change Ecology			
GEOG 435	Climate Change Mitigation			
GEOG 488	Geography of Energy Systems			
GEOG 350	Sustainability of Global Development			
Select 12 addition	nal credits in GEOL, GEOG, or ESS.	12		
Choose 3 GIS courses out of the following list. Note: GEOG 424 and 9 GEOG 483 can only count once in the major.				
GEOG 407	Spatial Analysis and Modeling			
GEOG 414	Socioeconomic Applications of GIS			
GEOG 424	Hydrologic Applications of GIS and Remote Sensing			
GEOG 483	Remote Sensing/GIS Image Analysis			
FIRE 407	GIS Application in Fire Ecology and Management	t		
Choose 2 Remote Sensing courses from the following list. Note: GEOG 424 and GEOG 483 can only count once in the major.				
FOR 472	Remote Sensing of the Environment			

Total Hours	86	-88
Free electives		18
MIS 453	Database Design	
MIS 440	Data Visualization for Managerial Decision Making	
MIS 350	Managing Information	
STAT 431	Statistical Analysis	
Choose 1 Data An	alytics course from the following list:	3
REM 476	Unmanned Aerial Systems (UAS) Operations	
REM 475	Remote Sensing Application with Unmanned Aerial Systems (UAS)	
GEOG 483	Remote Sensing/GIS Image Analysis	
GEOG 424	Hydrologic Applications of GIS and Remote Sensing	

Courses to total 120 credits for this degree

Fall Term 1		Hours	
ENGL 101	Writing and Rhetoric I	3	
GEOG 100	Introduction to Planet Earth	3	
GEOG 100L	Introduction to Planet Earth Lab	1	
MATH 143	Precalculus I: Algebra (or higher)	3	
Oral Communication Course			
Social and Behavioral Way	s of Knowing Course	3	
	Hours	16	
Spring Term 1			
ENGL 102	Writing and Rhetoric II	3	
GEOG 165	Human Geography	3	
or GEOG 200	or World Cultures and Globalization		
Humanistic and Artistic W	ays of Knowing Course	3	
GEOL/GEOG/ESS Elective		3	
GEOL/GEOG/ESS Elective		3	
	Hours	15	
Fall Term 2			
ENGL 313	Business Writing	3	
or ENGL 317	or Technical Writing II		
STAT 251	Statistical Methods	3	
GEOL/GEOG/ESS Elective		3	
Scientific Ways of Knowing	g Course	4	
	Hours	13	
Spring Term 2			
CS 212	Practical Python	3	
or CS 120	or Computer Science I		
or US 112	or Computational Trinking and Problem Solving	0	
GEUG 385		3	
GEOG 301 OR GEOG 317 OR GEOG 330 OR GEOG 350 OR GEOG 365 OR GEOG 401 OR GEOG 410 OR GEOG 430 OR GEOG 435			
GEOG 301 OR GEOG 317 0	R GEOG 330 OR GEOG 350 OR GEOG 365 OR GEOG 401	3	
OR GEOG 410 OR GEOG 43	O OR GEOG 435		
Remote Sensing, Major Ele	ective Course	3	
	Hours	15	
Fall Term 3			
GEOG 390	Cartographic Design & Geovisualization	3	
GIS, Major Elective Course			
Humanistic and Artistic W	ays of Knowing Course	3	
Elective Course		3	
GIS Elective, Major Elective	e Course	3	
	Hours	15	
Spring Term 3			
GEOG 475	Intermediate GIS	3	
American Diversity Course		3	
Elective Course		4	

Elective Course Elective Course		3
		3
	Hours	16
Fall Term 4		
GEOG 479	GIS Programming	3
GEOG 493	Senior Capstone in Geography	3
GEOL/GEOG/ESS Elective Course		3
GIS, Major Elective Course		3
Elective Course		3
	Hours	15
Spring Term 4		
Remote Sensing, Major Elective Course		3
Data Analytics, Major Elective Course		3
GIS, Major Elective Course		3
Elective Course		3
Elective Course		3
	Hours	15
	Total Hours	120

The degree map is a guide for the timely completion of your curricular requirements. Your academic advisor or department may be contacted for assistance in interpreting this map. This map is not reflective of your academic history or transcript and it is not official notification of completion of degree or certificate requirements. Please contact the Registrar's Office regarding your official degree/certificate completion status.

- The ability to write clearly and to verbally explain problems and issues in geographic science and related human and environmental topics in an effective manner and with supportive visual and statistical materials.
- 2. The ability to understand empirical research reports and most methodology in the science of geography and related fields.
- 3. The ability to use GIS to map and analyze spatial patterns and relationships in a wide variety of data types.
- 4. The ability to use basic statistics and data analysis for constructing models of cause and effect.
- The ability to design research methods to both problem-solve and to provide sound analysis for addressing practical and policy related questions.