

# GEOGRAPHY, B.A. - GEOSPATIAL APPLICATIONS OPTION

Millersville University's Geospatial Applications concentration offers a comprehensive program of study that emphasizes the acquisition of skills in geographic information systems (GIS), remotes sensing, map use and interpretation, cartography, spatial analytical skills, and advanced geospatial applications. Graduates of this program have the foundation for further academic study in disciplines addressing geographic and environmental issues in the social and natural sciences, or for immediate employment in public and private sectors in environmental and urban planning and management where GIS and geospatial analysis skills are highly desirable.

Geospatial Applications is available as concentration within the Geography major. 42 credits and a minor program of study required.

## Major in Geography

Code	Title	Hours
HUMAN DIMENSIONS OF SUSTAINABILITY		3
GEOG 120	Human Geography	
ENVIRONMENTAL FOUNDATIONS		3
GEOG 230	Physical Geography	
ENVIRONMENTAL TECHNIQUES		12
GEOG 281	Maps and GIS	
GEOG 292	Quantitative and Spatial Analysis	
GEOG 295	GIS I: Vector Data Analysis	
GEOG 296	GIS II: Raster Data Analysis	
POLICY AND LEADERSHIP		3
GEOG 372	Urban and Regional Planning	
CONCENTRATION IN GEOSPATIAL APPLICATIONS - See separate block		
<b>Total Hours</b>		<b>21</b>

## Concentration in Geospatial Applications

Code	Title	Hours
GEOGRAPHY TECHNIQUES COURSES - Choose 6 hours from:		6
Any 28-level GEOG course(s)		
Any 29-level GEOG course(s)		
Any 38-level GEOG course(s)		
Any 39-level GEOG course(s)		
Note: This requirement may not be satisfied with GEOG 281.		
APPLIED GEOGRAPHY COURSES - Choose 6 hours from:		6
GEOG 278	Transportation Geography	
GEOG 304	Water Resources Management	
GEOG 305	Energy Sustainability	
GEOG 306	Environmental Impact Assessment	
GEOG 307	US Environmental Policy	
GEOG 336	Climate And Society	
GEOG 407	Global Environmental Policy/Negotiation	
REGIONAL DIMENSIONS - Choose 1 class from:		
Any 14-level GEOG course(s)		

Any 24-level GEOG course(s)

Any 34-level GEOG course(s)

Any 44-level GEOG course(s)

### GEOSPATIAL APPLICATIONS RESEARCH/PRACTICUM

Co-Op in Geography or Senior Thesis - Choose 3 hours from: 3

GEOG 300 Co-Op Ed Experience in Geog

GEOG 400 Co-Op Ed Experience in Geog

GEOG 500 Co-Op Ed Experience in Geog

GEOG 488 Senior Thesis

GEOG 499 Departmental Honors

### ADDITIONAL REQUIRED GEOGRAPHY ELECTIVE

undefined - Choose 1 class from:

Any GEOG course(s)

Note: This requirement may not be satisfied with GEOG 120, GEOG 230, GEOG 281, GEOG 292, GEOG 295, or GEOG 372.

Any GEOG courses taken in excess of requirements will be listed here and count toward major GPA.

**Total Hours** 15

## Req Related for Geography, BA

**Code** **Title** **Hours**

A MINOR IS REQUIRED

Select a minor OTHER THAN Geography. Recommended minors with an environmental emphasis: Biology, Geology, Meteorology, Oceanography, Earth Science, Env Hazards Emergency Mgmt, Env Policy Regulation, Land Use, Water Resources Industrial and Environmental Health, Quantitative Methods in Env Science, Occupational Safety, Other relevant minors: Criminology, Government, International Studies, and Print Media Studies.

### REQUIRED RELATED COURSES

Elements of Stat I or Survey of Statistics - Choose 1 of the following: 3

MATH 130 Elements of Statistics 1

MATH 235 Survey of Statistics

Calculus for Management or Precalculus - Choose 1 of the following: 4

MATH 151 Calculus for Management

MATH 160 Precalculus

**Total Hours** 7