Millersville University’s Geospatial Applications concentration offers a comprehensive program of study that emphasizes the acquisition of skills in geographic information systems (GIS), map use and interpretation, cartography and basic analytical skills. The minor is housed in the Department of Geography.

**Regulations Governing Minor Course Work**
1. There shall be a minimum of 18.0 credit hours with a minimum Millersville QPA of 2.0.
2. Only one course which counts toward your major may be counted toward your minor.
3. Courses that count toward a minor are also eligible to be used to satisfy the current University-wide General Education requirements subject to normal distribution requirements.
4. At least two courses should be at the upper-division level (300-400). Exceptions may be requested upon evidence of program depth.
5. No course needed for the minor may be taken Pass-Fail.
6. One-half or more of the work required for the minor must be completed at Millersville University.
7. No student may minor in his or her major.

### Minor in Geospatial Applications

**Code**  | **Title**                      | **Hours**
----------|--------------------------------|--------
Intro Level GEOG Course - Choose 1 of the following:  | 3
GEOG 101  | The Global Environment        |        
GEOG 120  | Human Geography               |        
GEOG 130  | Intro to Environmental Science|        
GEOG 230  | Physical Geography            |        
GEOG 281  | Maps and GIS                  | 3      
GIS:Vector Data Analysis                               | 3      
GEOG 295  | GIS I: Vector Data Analysis   |        
GIS:Raster Data Analysis or Field and Research Methods - Choose 1 of the following: | 3
GEOG 296  | GIS II: Raster Data Analysis  |        
GEOG 289  | Field and Research Methods in Geography |        
GEOG 38@ or 39@ Elective - Choose 1 class from:       |        
Any 38-level GEOG course(s)                           |        
Any 39-level GEOG course(s)                           |        
Upper Level Geography Elective - Choose 1 class from: |        
Any 3-level GEOG course(s)                            |        
Any 4-level GEOG course(s)                            |        

**Total Hours**  | 12