# GEOGRAPHIC INFORMATION SCIENCE, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Requirements

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## Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student’s major(s).

### Prescribed Courses

- *Prescribed Courses: Require a grade of C or better*

  - GEOG 160 Mapping Our Changing World 3

### Additional Courses

- *Additional Courses: Require a grade of C or better*

  Select 6 credits of the following: 6

  - GEOG 361 Cartography–Maps and Map Construction
  - GEOG 362 Image Analysis
  - GEOG 363 Geographic Information Systems

  Select 9 credits (at least 6 credits at the 400-level) of the following: 9

  - GEOG 323
  - GEOG 417 Satellite Climatology
  - GEOG 461W Dynamic Cartographic Representation
  - GEOG 463 Geospatial Information Management
  - GEOG 467 Applied Cartographic Design
  - GEOG 468 Geographic Information Systems Design and Evaluation
  - GEOG 485 GIS Programming and Software Development