### REQUIRED FOUNDATION COURSES (13 credits)

- **CSIS 1000** Intro to Computer Apps & Internet (3) (F/S/M)
- **CSIS 3200** Database Design & Management (3) (F)
  
  Pre-req: CSIS 1000
- **MATH 1040** Statistics (4) (F/S/M)
  
  Pre-req: C or better in MATH 1010 or ACT 23+
  
  And

- **CSIS 1400** Fundamentals of Programming (3) (F/S)
  
  Pre-req: MATH 1010 or ACT 23+

  **OR**

- **GEOG 2920** GIS Programming w/ Python Script (3) (F/S)
  
  Pre-req: Instructor Permission

### GIS CERTIFICATE REQUIREMENTS (20 credits)

- **GEOG 2900** GPS Theory, Technology, & Methods (2) (S)
  
  Pre-req: Instructor Permission

- **GEOG 3500/3505** Intro. to Cartography/Lab (4) (F odd)

- **GEOG 3550/3555** Principles of GIS/Lab (5) (F)
  
  Pre-req: CSIS 1000

- **GEOG 4150** Advanced GIS Analysis Methods Lab (3) (S)
  
  Pre-req: GEOG 3550

- **GEOG 4500** GIS Research Project (Capstone) (3) (F/S)
  
  Pre-req: GEOG 4150

  Note: Must be approved 2 semesters before signing up for this course.

  And

Choose 3 credits from the following:

- **GEOG 3110/3115** Earth from Space: Intro to Remote Sensing/Lab (4) (S odd)

- **GEOG 3990** Undergraduate Research GEOG/GIS (3) (F/S)
  
  Pre-req: Instructor Permission

- **GEOG 4890** GIS Internship (3) (F/S)

- **CSIS 1410** Object Oriented Programming (3) (F/S)
  
  Pre-req: CSIS 1400

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**Additional Information**

Students must complete all coursework with a C grade or above.

Pre-Requisites and the semester that courses are offered are subject to change. Please check the current catalog for updates.

F: Fall courses
S: Spring courses
M: Maymester/Summer courses