GRADUATE CERTIFICATE IN GIS AND APPLIED GEOGRAPHY

Requirements for Completion

Students enrolled full-time can complete the requirements for this 12-credit program in one year. Students admitted into the program for the fall semester should be able to enroll in all the necessary courses within the academic year and can complete their final project by the end of the spring semester.

Specific Requirements

- Students enrolling in the program will be required to complete GEPL 5110 and GEPL 6950 (6 credits).
- Students must complete 6 credits from the electives list.
- Students must maintain a minimum "B" average to complete the certificate program.
- Course selection and the sequence of courses will be agreed upon by the student and the program coordinator to help students complete the program and gain the necessary skills.

Course List

Code	Title	Hours
GEPL 5110	Geographic Information Systems	3
GEPL 6950	Applied Geographic Workshop	3
Select a minimum of 6 credits of the following:		6
GEPL 5180	Geographic Information Systems Applications	
GEPL 5490	Remote Sensing Of The Environment	
GEPL 5500	Digital Image Analysis	
Total Hours		**12**

- PLO 1: Apply and demonstrate the principles of geographic information science
- PLO 2: Formulate requirements and constraints in spatial analysis
- PLO 3: Complete spatial analysis with selected GIS software packages
- PLO 4: Develop skills for designing and implementing real-world GIS applications
- PLO 5: Gain hands-on experience with popular GIS software such as ArcGIS
- PLO 6: Learn how to communicate effectively via mapping and graphic presentation
- PLO 7: Apply GIS technology to evaluate real-world problems, and communicate the GIS project process and results in written and graphic media at a professional level.
- PLO 8: Draw upon the underlying theory behind GIS technology (including projections and spatial databases) to optimize application of the technology and extend it into new areas.
- PLO 9: Understand the spatial aspects of an external client s GIS needs and develop a practical project plan for addressing those needs
- PLO 10: Design, compile, and develop a spatial database and a set of analytical tools into a system appropriate to the problem
- PLO 11: Demonstrate a mastery of geographic analysis and cartographic skills