

## CERTIFICATE PROGRAMS AVAILABLE

Students must complete each course in a certificate program with a grade of “C” or better. The courses cannot be taken pass/fail.

### GEOGRAPHIC INFORMATION SYSTEMS (GIS)

The certificate of completion in Geographic Information Systems will provide students and working professionals with the theoretical knowledge and technical and application skills needed to successfully use Geographic Systems (GIS), remote sensing, Global Positioning Systems (GPS), and cartography to determine solutions to problems in the management, conservation, and improvement of natural and man-made environments.

In any field related to natural resources, and for many fields related to the administration of man-made environments, education and training in GIS have gone from being specialized skills to being *de facto* requirements. This certificate is designed for professionals who work in those fields, for professionals who work in those fields, for professionals who analyze human and socio-economic data, and for degree-seeking students interested in anthropology, archaeology, biology, business, civil engineering technology, criminal justice, ecology, economics, environmental science, geography, geology, health sciences, land use planning, and social sciences, as well as other programs.

#### Admissions Requirements:

1. There are no special admission requirements for students seeking GIS certification.
2. All students must take the prerequisite courses or provide evidence of equivalent training and receive an official waiver. The courses that have prerequisites are GIS 2250 and GIS 4840. GIS 4850 and GIS 4890 require upper-division standing or senior standing. All courses can be taken by permission of instructor (the official waiver).

#### Completion Requirements:

All students seeking GIS certification must maintain a 3.0 or above in the certificate program because GIS technology and its applications require a high degree of discipline and commitment.

Required Courses	Semester Hours
___ GIS 1710 Terrestrial Navigation .....	2
___ GIS 2250 Introduction to Geographic Information Systems .....	3
___ GIS 3250 Computer Cartography .....	3
___ GIS 4840 Remote Sensing .....	3
___ GIS 4850 Advanced Geographic Information Systems .....	3
___ GIS 4860 Applications of ARC/INFO to Natural Resources Management .....	3
___ GIS 4870 Spatial Databases Design, Implementation, and Management .....	3
___ GIS 4890 Advanced GIS Laboratory (Senior Experience) .....	3

*Total credits for Certificate*.....23