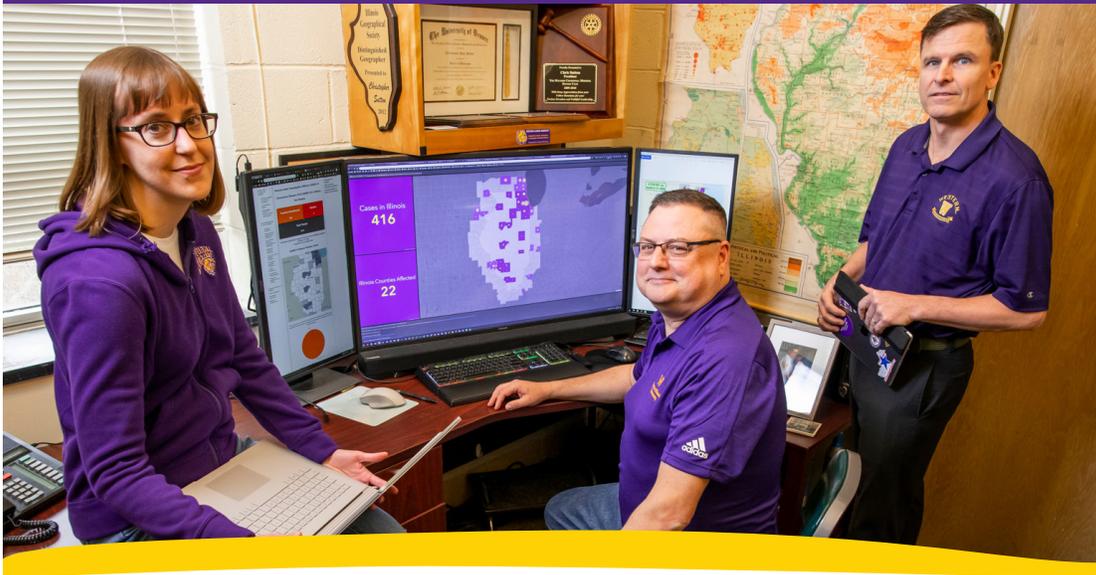


Post-Baccalaureate Certificate in GIS Analysis



The Department Earth, Atmospheric, and Geographic Information Sciences in conjunction with other departments, offers this interdisciplinary, skill-based program (Geographic Information Systems or GIS) designed to train students to become qualified GIS analysts in their specific specialty fields or disciplines. The certificate welcomes students who wish to become an expert in: How to use GIS to model scientifically his/her interested phenomena; How to use and manipulate GIS data and tools properly to provide best-available GIS solutions; How experts in his/her field solve space-related problems using GIS, and how to reproduce the existing GIS applications; How to design and implement a GIS project in his/her field to solve real-world problems with practical GIS data and analytical procedures; How to make good maps and how to produce GIS technical reports of professional quality.

Admission Requirements

Students applying for the certificate must have a cumulative undergraduate grade point average of 2.75 or higher and an undergraduate degree from any academic field. Nondegree students seeking the certificate only must meet the admission requirements for the Graduate School; students seeking both a degree and the certificate must meet the admission requirements for their degree program.

Academic Requirements

Students must have a cumulative 3.0 GPA for all coursework required for completion of the certificate. A post-baccalaureate certificate will not be awarded to a student who earns more than 3 semester hours (sh) of “C,” “D,” “F,” or “U” grades in the graduate-level courses required for the completion of the certificate. No course for which a student has received a grade of “D” or less may be used to satisfy certificate requirements. Transfer work or course substitutions are not allowed in the certificate programs. The work required for the certificate must be completed within three calendar years.

If approved by the specific academic department, courses taken to satisfy certificate requirements may be used to satisfy post-baccalaureate degree requirements at the University.

Certificate Requirements

The program requires completion of 18 sh broken into three sections. Section 1 covers core courses; Section 2 covers selection of one course out of several courses; and Section 3 covers selection of additional three courses from partner departments.

Courses taken while working on this certificate can be counted towards any graduate degree program at WIU. Students who wish to pursue the certificate must consult with their graduate program advisor.

Career Opportunities

In today’s multi-faceted fields, there are few jobs beyond the technician level that do not require a background in Geography Information Systems (GIS). For example, utility companies, insurance companies, transportation, tourism companies, airlines, health departments, economic development agencies, the Illinois Department of Natural Resources, Illinois Environmental Protection Agency, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service all require their mid-level employees to be familiar with the use and application of GIS to their particular missions. Potential career opportunities include the following:

- Resource development
- Environmental consulting
- Landscaping
- Working in state and federal agencies
- Urban planning
- Industrial or urban facility and site development
- Agricultural management
- Crime mapping
- Emergency management
- Climatology

Facilities

The GIS Analysis post-baccalaureate certificate utilizes modern remote sensing/GIS computer instructional labs at the Macomb (Waggoner Hall and Tillman Hall) and Moline (WIU-QC Complex) campuses. ESRI ArcGIS software is

Program Location:
Macomb, Quad Cities

Contact Information

Questions about the program:
Department of Earth, Atmospheric, and Geographic Information Sciences
Samuel Thompson,
department chairperson
(309) 298-1648
S-Thompson@wiu.edu
eagis@wiu.edu
wiu.edu/eagis

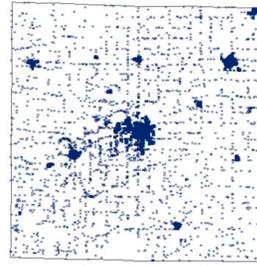
General admission questions:
School of Graduate Studies
(309) 298-1806 or (877) WIU GRAD
Grad-Office@wiu.edu
wiu.edu/grad

W
Western Illinois
University

available for classroom and individual learning, and students are provided with ArcGIS student versions for their personal computers.

The Department of Earth, Atmospheric, and GIS houses the GIS Center on the third floor of Tillman Hall. The center is responsible for compiling, managing, and storing GIS data layers. Graduate students are encouraged to work and gain hands-on experience in the GIS Center.

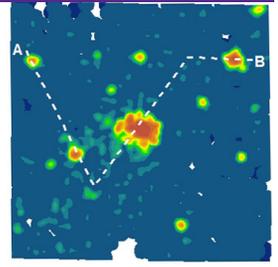
Other facilities include two GIS labs with over 30 computers that are fully networked and use ERDAS Imagine software. Other software includes ESRI GIS, such as ArcGIS. Additionally, the department has five wired electronic classrooms plus wireless connectivity throughout Tillman Hall.



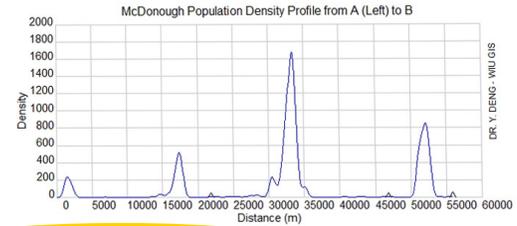
Locations of residential buildings in McDonough County



Location of McDonough County, IL



Population density of McDonough County



Distinctive Features

- Students will be taught correct use of GIS over a broad range of real-world problems, including both environmental (including ecological) and socioeconomic applications, many of which share similar GIS principles, methods, and tools.
- There is an emphasis on a modeling-oriented GIS approach to guide students through a three-step procedure of (1) understanding and conceptualizing the problem in GIS, (2) representing the problem in GIS, and (3) analyzing the problem using GIS techniques.
- Students are trained to use GIS wisely based on a solid understanding of this science, including its principles, methodologies, tools, and limitations.

