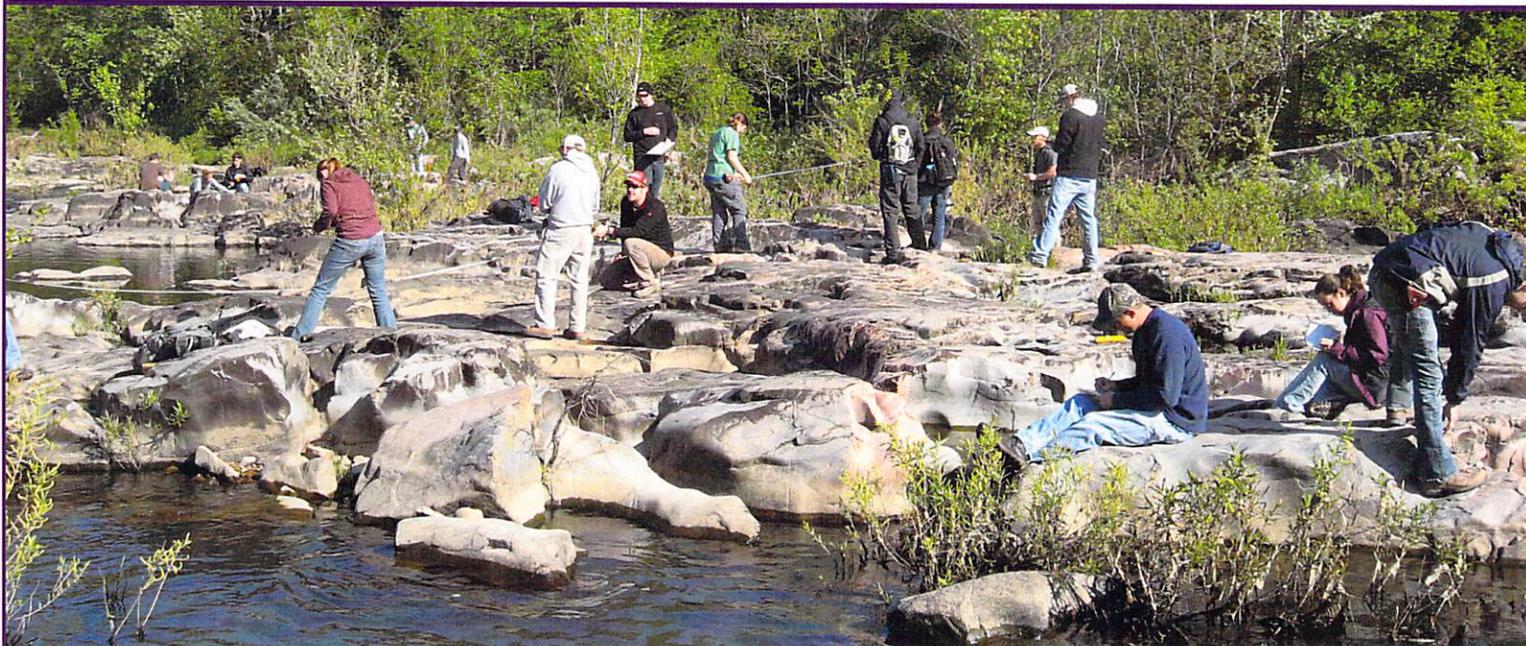


Geology

Department of Earth, Atmospheric, and Geographic Information Sciences, College of Arts and Sciences



Major Program

B.S. Geology – Students' geology training will begin with an introduction to the earth's physical processes and materials and a survey of the earth's geologic history. Geology courses emphasize the various fields of study within the discipline, including mineralogy, petrology, sedimentology, structure, field methods and paleontology. Field geology teaches you techniques used in field mapping, such as use of a pocket transit, GPS receiver, laser transit and other specialized equipment. Upper-level courses include the study of geologic maps, earth structures and the rock and fossil record. As a geology major, students will also take courses such as introductory calculus, chemistry and physics or biology.

B.S. Geology: Paleontology Option – The paleontology option gives motivated students a chance to combine a solid foundation in geology with an exploration of its interdisciplinary connections with botany or zoology (see paleontology flat sheet).

Real-World Experience

Many courses include field trips that last from one to four days. Our required biennial, six-week Geology Summer Field Camp in South Dakota is considered by most students to be the unifying highlight of their studies. Knowledge from the classroom is put into practice here. Students look forward to sharing the learning experience with their fellow majors in South Dakota, Yellowstone and the Tetons.

General Education

The WIU Department of Earth, Atmospheric, and Geographic Information Sciences offers studies based on the broad foundation of the general education curriculum—classes taken during freshman and sophomore years. General education accounts for approximately one-third of the semester hours required for this degree. It includes courses in composition and speech plus electives from the natural sciences, social sciences, humanities, human well-being and multicultural studies.

Faculty

Geology courses are taught by faculty holding doctoral degrees from distinguished universities such as Indiana University, University of California at Davis, Southern Methodist University in Texas and Yale University. All are dedicated educators, skilled in fostering active student participation and undergraduate research.

Scholarships

The Department of Earth, Atmospheric, and Geographic Information Sciences offers five scholarships for Geology majors:

- The *Richard Schafer Freshman Scholarship* is offered to entering freshmen who hold a high school grade point average (GPA) of 3.2/4.0 or a minimum composite ACT of 24.
- The *Richard Schafer Community College Transfer Scholarship* is offered to entering transfer students with a minimum of 30 semester hours (SH) and an overall GPA of 3.0/4.0 with 4 SH of completed coursework in geology/earth sciences.
- The *Richard Schafer Summer Field Camp Scholarship* is a biennial scholarship offered to junior or senior geology majors with an overall GPA of 3.0.
- The *Scholarship for New Geology Major* is offered to a newly declared, full-time geology major (non-entering freshman) within previous 12 months who has successfully completed Geology 110 or Geology 112 with a minimum overall GPA of 3.0.
- The *Continuing Student Alumni Award* is offered to a declared, full-time geology major with a minimum semester GPA of 3.25 for the previous semester.

Honors in Geology

To be eligible for the Centennial Honors College, entering freshmen must meet two of the following three criteria: Have an 1160 SAT (24 ACT), have a 3.4/4.0 GPA or higher, or be in the top 15 percent of their graduating class. Transfer and current WIU students who wish to join the Honors College (including the Quad Cities Honors Program) must have a 3.4 GPA on a 4.0 scale based on 12 SH or more. Honors credit is given for honors coursework completed at other accredited institutions. To find out more, visit wiu.edu/Honors.

General honors seminars in the humanities, sciences and social sciences provide students with the opportunity to explore key academic issues with distinguished faculty members. In the geology major, honors students take courses for honors credit and, as seniors, prepare an honors thesis under the direction of a department faculty member.

Student Activities

The WIU Department of Earth, Atmospheric, and Geographic Information Sciences offers two student organizations: (1) Sigma Gamma Epsilon, a national earth science honorary organization, and (2) the Geology Club. These organizations sponsor activities such as field trips, visiting lectures, picnics and fundraising.

Special Opportunities

The department offers small classes with accessible faculty in Tillman Hall. It also offers personalized professional advising, all labs taught by faculty members and undergraduate research opportunities. All interested and motivated geology students at Western have the opportunity to conduct original research under the direction of a faculty mentor. Most students present their research at regional or national meetings, with travel expenses partly or wholly covered by the department. Recently, students have worked on a wide variety of topics in hydrology, igneous petrology and sedimentary geology.

After College

Our graduates have built a record of success, working throughout the United States and in foreign countries for companies that range from small, independent entities to corporations such as U.S. Gypsum, Conoco, ARCO, Texaco, Chevron, U.S. Steel, EOG Resources and Marathon Exxon. Some alumni are teachers in community colleges and universities. Many of our students work for state or federal agencies. Approximately 25 percent of WIU's geology graduates go on to complete higher degrees at universities like Arizona, Indiana, The Ohio State, Purdue, Stanford, Louisiana, Utah, Texas A&M and Wyoming. In the past, careers in geology concentrated on exploration for minerals or energy resources. While such careers are still important, geologists are now finding careers in areas related to the environment, engineering projects and water resources. Some geologists are even involved in space and planetary exploration.

Since a career in geology may lead to extensive travel, office work, laboratory experiments, field work or classroom teaching, students will find it helpful to develop skills in communication, foreign languages, business, economics, art and politics.

For More Information

Contact the WIU Department of Earth, Atmospheric, and Geographic Information Sciences, Tillman Hall 312, Western Illinois University, 1 University Circle, Macomb, IL 61455-1390. For more information, email eagis@wiu.edu, call (309) 298-1648, fax (309) 298-3003, or visit wiu.edu/eagis.

Campus Visits

The Admissions Reception Center (Sherman Hall 115) is open most weekdays from 8 a.m.-4:30 p.m. when the University is in session. Group information sessions are available on Mondays and Fridays at 10 a.m. and 1 p.m., and individual appointments can be made on Tuesdays, Wednesdays and Thursdays. Campus tours are conducted at 11 a.m. and 2 p.m., Monday through Friday. Appointments with advisors, faculty or a financial aid advisor may be arranged separately during the week. The Admissions Reception Center is open from 9 a.m.-1 p.m. most Saturdays when the University is in session. A group information session is available at 10 a.m., and a campus tour is conducted at 11 a.m. Students may schedule a visit or tour online at wiu.edu/admissions by selecting "Visit Campus." Students may also schedule a visit, tour or individual appointment by calling toll free (877) PICKWIU (742-5948) or (309) 298-3157, or by e-mailing admissions@wiu.edu.



wiu.edu/eagis

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Updated July 2018



WESTERN
ILLINOIS
UNIVERSITY

Paleontology

Department of Earth, Atmospheric, and Geographic Information Sciences, College of Arts and Sciences



Major Program

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Real-World Experience

The paleontology option joins together the strong field-based approach to geological education with a specimen-based approach to paleontology. A six-week geology field camp is a required part of the degree. Students are encouraged at an early stage to begin working on their own research projects.

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Updated June 2018



**WESTERN
ILLINOIS
UNIVERSITY**

Western Illinois University

Department of Earth, Atmospheric, and
Geographic Information Sciences

New in Fall 2019 *Environmental Geology Option*

Are you interested in a career in the environmental field?

Are you concerned about the state of our environment?

Would you like to learn more about our earth and water resources?

Check out the new Environmental Geology B.S. Degree Option



Check out Geology B.S. Option C -
Environmental Geology in the EAGIS
undergraduate catalog section

Installing a groundwater
monitoring well

Sampling a spring

Tour of McDonough County Landfill



METEOROLOGY

DEPARTMENT OF EARTH, ATMOSPHERIC AND GEOGRAPHIC INFORMATION SCIENCES

The Meteorology Program at Western Illinois University is very hands-on. Students get experience in forecasting, computer programming, data visualization, statistical analysis, electronics and building instrumentation, designing and implementing field projects and much more!

Upper-division classes are calculus-based and assume a working knowledge of physics, so it's important that you take the right classes to prepare yourself for success.



For High School Students

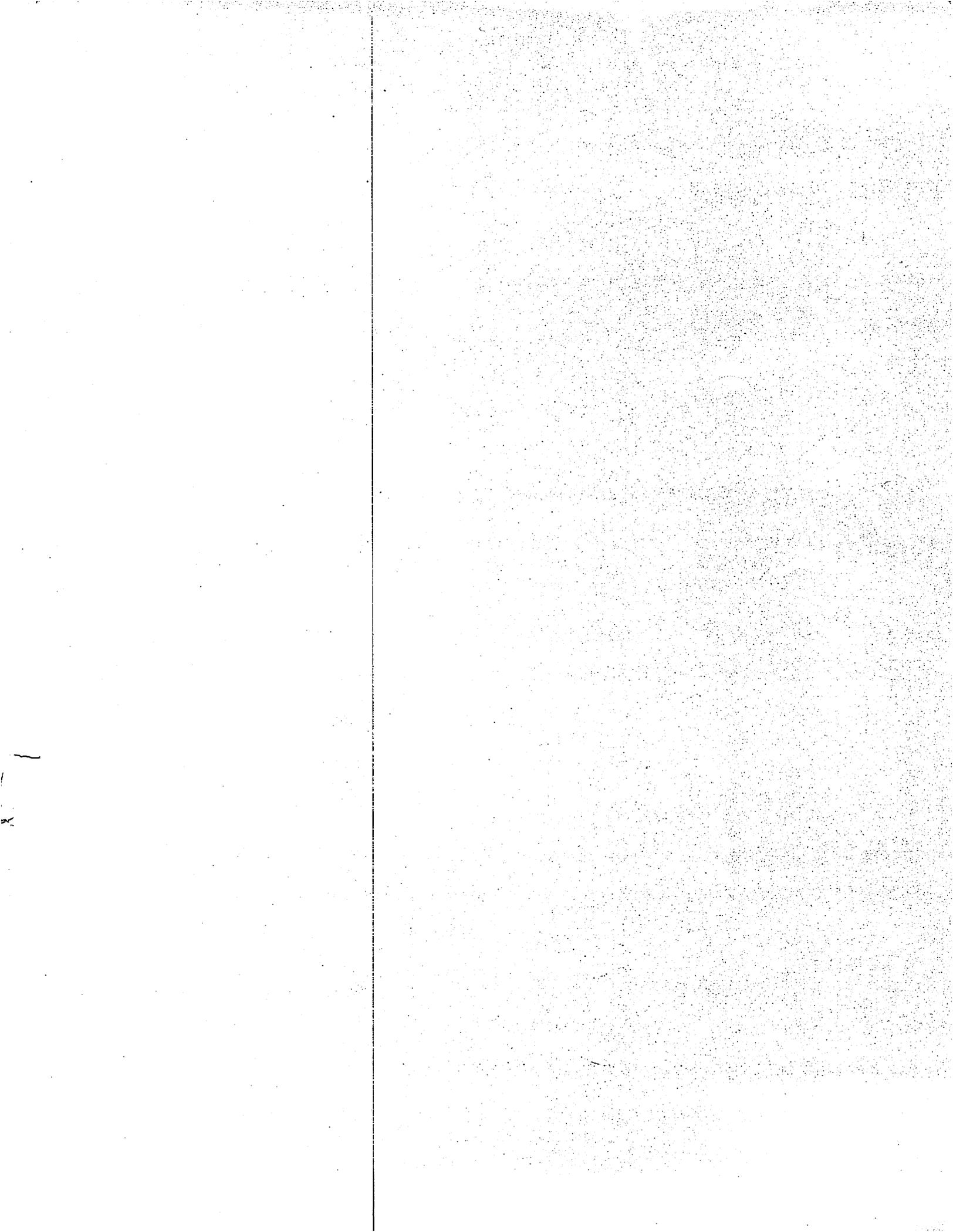
In order to succeed in the Meteorology Program you should plan to take the following classes in high school, if they are available:

- Take as much math as you can!
 - ✓ Calculus and statistics classes will help a lot.
 - ✓ If your school doesn't offer calculus, try taking pre-calculus.
 - ✓ **Note:** The math placement test covers algebra, trigonometry and some geometry. If you haven't taken algebra for a while and you don't have math AP credit, then be sure to brush up on your algebra and trigonometry before the test!
- Physics
- Chemistry
- Earth Sciences
- Computer programming and/or GIS (geographic information sciences)
- Taking three years of the same foreign language (with a C or better) will likely save you some money when you get here!

For Transfer Students

In order to succeed in the Meteorology Program, you should plan to take the following classes at your community college:

- Take as many of your general education (Gen-Ed) classes as you can. Contact the Admissions office to make sure your classes will transfer.
- Introduction to weather and climate (or its equivalent, but it must have a lab component to transfer)
 - ✓ Sometimes this is an earth sciences class. Check with your community college advisor.
- Get as much math out of the way as you can:
 - ✓ Calculus I, II, and III will all transfer to WIU!
 - ✓ Differential equations will NOT transfer to WIU.
- Physics classes
 - ✓ One or two physics classes are required.
 - ✓ Physics classes must be calculus-based.
- Introductory GIS (Geographic information science/systems) class, if available.



What is unique about the **WIU Meteorology Program?**

Program (Department of Earth, Atmospheric, and GIS)

- The **ONLY** Meteorology program in Illinois and one of the few programs in the nation with its own dual-polarization Doppler radar
- Undergraduate students can earn all academic requirements for employment with the National Weather Service (NWS)
- State-of-the-art meteorological data analysis and programming laboratory with 20 Linux-based workstations
- Full membership in the University Corporation for Atmospheric Research (UCAR)



Faculty and Teaching

- Integrating state-of-art technologies with excellent teaching strategies in the classroom Includes Excel, Arduino, MatLab, IDV, Vis5D, Fortran programming, Python, ArcGIS & Gempak
- Generated over \$600,000 in research and education grants through the National Science Foundation and other sources
- Tutoring students in Calculus and Physics regularly



Student Activities

- Severe Weather Club has been a winner of the Quad Cities NWS Weather-Ready National Ambassador of the Year Award
- Many educational outreach activity opportunities
- Opportunities to participate in faculty research

Employment

- Meteorology (Major) + Broadcasting (Minor) at **100% placement rate**
- Meteorology (Major) + GIS (Minor) at almost **100% placement rate**
- Many WIU graduates currently work in the Meteorology or GIS private sector

Other places our graduates are working:

- Meteorologists on television
- Meteorology-related work with the military
- Positions at the National Weather Service offices
- Many of our students admitted to graduate programs across the country



Visit the Meteorology Program at Western Illinois University at:
<http://www.wiu.edu/cas/eagis/>

Department of Earth, Atmospheric & Geographic Information Sciences



B.S. in Geographic Information Science

"100 percent job placement" ...

A black silhouette of a quadcopter drone is centered in the middle of the page. The drone is shown from a top-down perspective, with its four arms and propellers clearly visible. The text "100 percent job placement" is overlaid on the drone's body.

What We Offer:

Every student acquires GIS skills including spatial data analysis methods, modeling, data knowledge, software skills, and scripting. These skills make it possible for students to be employed immediately after graduation.

Careers include GIS technician, GIS Analyst, GIS specialist, Insurance adjuster, emergency management assistant, Cartographer, Data Acquisition, Planner, Teacher, Environmental GIS and many more.

Only program in the state with its own GIS Center, where students apply their skill sets to addressing real-world problems and gaining hands-on experience.

100 percent job placement for students who completed the degree and worked in the GIS Center.

Department and GIS Center have great reputations with employers.

Our Mission:

E.A.G.I.S. prepares students for the geospatial professions by teaching them how to think geographically using GIS to create maps to communicate and share information, solving real-world problems in society and the environment, anywhere in the world.

Our Students:

Our students have interned at the WIU GIS Center, Adams Electric Company, City of Kankakee, City of Joliet, US Army Corps of Engineers, WIU Go West, US Geological Survey, Western Illinois Regional Council and Pond & Company, plus others.

Our graduates work for National Information Solutions Cooperative in Lake Saint Louis, MO, Burns & McDonnell in Kansas City, MO, MGP Inc. in Des Plaines, IL, Bolton & Menk, Inc. in Mankato, MN, City of Naperville, IL. and others. Among the many positions held, included are GIS Analysts, GIS technicians, GIS directors and GIS managers.

Contact: Jennifer Sandrik-Rubio

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Eagis@wiu.edu and (309) 298-1648