

Integrated Baccalaureate and Master's Degree in Meteorology (BS) and GIScience and Geoenvironment (MS)



The integrated degree program in GIScience and Geoenvironment at Western Illinois University provides an opportunity for undergraduates to complete a Bachelor of Science degree in Meteorology and a Master of Science degree in GIScience and Geoenvironment in five years. In addition to earning both degrees in an accelerated timeframe, the integrated program includes additional opportunities to participate in a variety of experiential education activities such as a master's thesis, applied project or professional plan.

Admission Requirements

- The applicant should apply to the Western Illinois University School of Graduate Studies for admission to an integrated program in GIScience and Geoenvironment.
- The applicant must have a minimum cumulative GPA of 3.25 and a major GPA of 3.25, or a minimum cumulative GPA of 3.0 with a minimum 3.3 GPA in the last 30 sh taken at WIU.
- The applicant should provide a personal statement of purpose and request three letters of recommendation if applying for a graduate assistantship.
- Official transcripts will be obtained from the applicant's WIU record by the School of Graduate Studies.

Degree Requirements

The integrated degree program offers three degree options: (1) thesis, (2) applied project, or (3) professional plan. The thesis option (3 SH) seeks to answer a question relevant to an area of geographic inquiry. The applied project option (3 SH) is intended for students whose career aspirations are best served by gaining practical experience in the design and solution of a geographical or planning problem and presentation of the results. Both options require a research proposal to be presented and the completed thesis/applied project to be defended to faculty and students. The professional plan requires students to complete an internship (3 SH) and extended courses. The minimum required hours are 32 to 36 SH.

- The thesis option consists of 3 SH of thesis research (GEOG 698) and 14 SH of directed electives.

- The applied project consists of 3 SH of practical experience (GEOG 697) and 14 SH of directed electives.
- The professional plan consists of 3 SH of internship (GEOG 596 or 597) and 18 SH of directed electives.

Undergraduate students will be required to complete 120 SH of coursework. As part of the integrated master's degree program, students may take up to 9 SH as "bridge" courses, which count toward both the bachelor's and master's degrees. A student must be a senior and accepted into the integrated program before taking bridge courses.

Career Opportunities

There are a wide variety of career paths that our graduates choose to pursue, including:

- Earth Scientist
- Emergency Management
- Environmental Conservation
- Meteorologist
- Hydrologist
- Climatologist
- Forensic Meteorologist
- Weather Forecaster
- Wind Analyst
- Meteorological Data Analyst
- Aviation Meteorologist
- Consulting Meteorologist
- Utility/Construction Company Meteorologist
- Broadcast Meteorologist
- Science Reporter
- Weather Risk Analyst
- Damage Assessor

Contact Information

Questions about the program:

Department of Earth, Atmospheric,
and Geographic Information Sciences
Graduate Coordinator
(309) 298-1648
eagis@wiu.edu
wiu.edu/cas/eagis

General admission questions:

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



**Western Illinois
University**

Integrated Degree Course Requirements

Students must complete a minimum of 120 SH of credits to meet the Bachelor of Science degree requirements, including the following:

University General Education Requirements 55 SH

Undergraduate Core Courses 15 SH
 GEOG 301, 405†, 322, 327, 329

Options of Study (select A or B)

A. Operational Meteorology

1. Complete the following: METR 422, 429, 432, MATH 231, 333, PHYS 212..... 21 SH
2. Choose one of the following: METR 300, 425, GIS 403 and two of the following: CHEM 201, CS 114#, GEOL 115#, 380, GIS 403, GEOG 430, METR 220, 300, 333, 337, 425, PHYS 354 9-11 SH
3. Directed Electives 3 SH
4. Choose 3 SH from GEOG 497, 499..... 3 SH
5. Any Minor 16 SH
6. Open Electives 2-4 SH

B. Applied Meteorology

1. Complete the following: METR 220, 337, 425, GEOG 430 12 SH
2. Select 17 semester hours from the following: METR 300, 333, 422, 429, 432, GIS 202, 405, GEOG 251#, GEOL 115#, 380, MATH 134#, 231, 333, CHEM 201#, CS 114#, 214#, EM 276, 351, 352, HE 251, FIN 311, AGECE 447, POLS 300, BC&J 201, 340, 410, 430 17 SH
3. Directed Electives 3 SH
4. Choose 3 SH from GEOG 497, 499..... 3 SH
5. Any Minor 16 SH
6. Open Electives 2 SH

Graduate Core Courses 15 SH
 GEOG 505 Research Methods I 3 SH
 GIS 405 Advanced GIS Analysis 3 SH
 GIS 509 Fundamentals of GIS Analysis..... 3 SH
 GIS 511 Examination of GIS Data 3 SH
 One graduate seminar (GEOG 610, 630, 650) 3 SH

Select one of the following exit options 17-21 SH

A. Thesis

GEOG 698 Thesis 3 SH
 Directed Electives (includes up to 9 SH of bridge courses) 14 SH

B. Applied Project

GEOG 697 Applied Project 3 SH
 Directed Electives (includes up to 9 SH of bridge courses) 14 SH

C. Professional Plan

Internship (GEOG 596 or 597)..... 3 SH
 Directed Electives (includes up to 9 SH of bridge courses) 18 SH

Total Program 32-36 SH



Up to 9 SH of the following bridge undergraduate/graduate courses can be counted toward the 32-36 SH requirements: GEOG 403G Advanced Remote Sensing (3), GEOG 404G Advanced Quantitative Methods and Applications in GIS (3), GIS 405 Advanced GIS Spatial Analysis (3), GEOG 408G Environmental Applications of GIS (3), METR 425G Satellite and Radar Meteorology (3), GEOG 426G (cross-listed with BIOL 426G) Conservation and Management of Natural Resources (3), GEOG 443G Population Geography (3), GEOG 445G Urban Geography (3), GEOG 459G (cross-listed with BIOL 459G) Biogeography (3), GEOG 466G World Regions (Africa-cross-listed with AAS 466G) (3).