

# Geographic Information Science (GIS) Administration, M.S.

The MS in GIS Administration degree program requires a minimum of 36 credit hours, including 12 credit hours of business courses and 24 credit hours of GIS coursework. It has only one track.

Admission to the GIS Administration program does not require an undergraduate geography or related degree. However, foundation-level proficiency in GIS and experience with Esri ArcGIS Pro software are required to be successful in the program. These foundational proficiencies can be completed alongside core program courses or separately through our Graduate GIS Certificate program. Many students enter with no previous GIS coursework.

## Admission Requirements

In addition to the University graduate admission requirements described in the [Admissions](#) section of the catalog, the department bases decisions for regular admission on a holistic review of credentials in which the following criteria are used to assess the potential success of each applicant:

- GIS academic preparation\*
- Submission of a letter of intent demonstrating graduate-level motivation and writing abilities
- Submission of a resume including appropriate employment at increasing levels of responsibility
- List two names of professional and/or academic references including title, organization, email, and phone number

\*Transcripts are reviewed to determine if GIS foundational proficiencies have been met.

No more than 49% of program requirements for this degree may be in traditional business subjects.

## Degree Requirements

Candidates admitted to the GIS Administration program are required to complete all courses with a "C" grade or better and maintain an overall graduate and GIS GPA of 3.0 (B) or better. Core courses that are not compliant with UWF's six-year time-to-degree policy must be reviewed to determine proficiency. Enrollment in core GIS courses is generally limited to GIS candidates.

GIS Capstone is a culminating academic and intellectual experience to be completed at the end of the program. The capstone course must be taken 2 times over 2 full-term semesters totaling 6 credit hours where students complete the project in 2 parts: Capstone Planning (3 credit hours) and Capstone Execution (3 credit hours). The capstone can be administrative, programmatic, or research-focused. The capstone course serves as documentation of the student's personal mastery of professional competencies. It is designed to be an integrative experience for Professional Science Master's students.

GIS Capstone Project - The capstone project includes a written paper and a public oral presentation of the project. Students will need to identify a client contact for their project and maintain communication with them all the way through the capstone project process.

Also, students will need to link their GIS capstone to the client's organizational mission. The organization can range from a small

non-profit to a large multinational corporation. The capstone project should affirm the student's ability to think critically and creatively, solve practical problems, make ethical decisions, communicate effectively, and draw on coursework where relevant.

## Geographic Information Science Administration

UWF's online Geographic Information Science (GIS) Administration degree includes a total of 36 semester hours (sh). Students will explore 12 sh of business management skills and 24 sh of advanced geographic information science topics.

For students who do not have a GIS background, 15 sh of foundational proficiencies courses are required and can be taken alongside the business classes. Foundational proficiencies do not count towards the degree. Many students enter with no previous GIS coursework. Alternatively, students may wish to pursue the Graduate GIS Certificate, a pathway program, before applying for the full master's degree.

### Foundational Proficiencies

GIS 5050	Geographic Information Systems	3
GIS 5050L	Geographic Information Systems Lab	1
GIS 5007	Computer Cartography	3
GIS 5007L	Computer Cartography Lab	1
GIS 5027	Aerial Photography and Remote Sensing	3
GIS 5027L	Aerial Photography and Remote Sensing Lab	1
GIS 5100	Applications in Geographic Information Systems	3
<b>Total Hours</b>		<b>15</b>

### Management Core

GEB 5816	MBA Foundations: Principles of Human Resources Management	1.5
GEB 5871	MBA Foundations: Managerial Economics	1.5
GEB 5872	MBA Foundations: Financial Management I	1.5
GEB 5875	MBA Foundations: Management Skills and Applications	1.5
MAN 6156	Management and Organizational Behavior	3
GEB 5870	MBA Foundations: e-Business Systems	1.5
GEB 5876	MBA Foundations: Marketing Management	1.5
<b>Total Hours</b>		<b>12</b>

### Geographic Information Science

GIS 5103	GIS Programming	3
GIS 5935	Special Topics in Geographic Science	3
GIS 6005	Communicating GIS	3
GIS 6105	Spatial Data Management	3
GIS 6110	Advanced Topics in Geographic Information Science	3
GIS 6555	Geographic Information Systems Management	3
GIS 6955	GIS Capstone	6
<b>Total Hours</b>		<b>24</b>

No more than 49% of the program requirements for this degree may be in traditional business subjects.

## Graduate Geographic Information Science Certificate

Department: Earth and Environmental Sciences

Semester Hours: 12

The Graduate Geographic Information Science (GIS) Certificate program is designed to teach students and working professionals both the highly in-demand technical skill of using industry-standard geospatial software as well as a strong conceptual foundation in Geographic Information Science. Graduate-level courses focus on project development and management relating to various applications. Required courses and GIS internship have been carefully combined to reflect the real-world requirements needed for careers in the geospatial sciences. Students completing this program can expect to be marketable as GIS Technicians, GIS Analysts, GIS Specialists, and GIS Managers within various industries. All courses are offered online.

Admission to the Graduate GIS Certificate program does not require an undergraduate geography or related degree. However, foundation-level proficiency in GIS and experience with Esri ArcGIS Pro software are required to be successful in the program. These foundational proficiencies can be completed alongside core program courses. Many students enter with no previous GIS coursework.

All graduate-level foundational proficiency courses and core courses with the exception of the GIS Internship can be applied to the MS in Geographic Information Science Administration program.

Prerequisites - Special Technology/Hardware/Skills Requirements for GIS:

- In order to participate in our online GIS courses, students must have access to their own laptop or personal computer, speakers, microphone or headset, and consistent broadband internet access (high-speed). A mouse is highly recommended for those using a laptop. Students can expect to use UWF Gmail email for course communications and the UWF Canvas eLearning platform to access courses that require a compatible web browser.
- Access to required software is provided through Argo Apps for GIS virtual machines. A GIS User training and quiz are required for access via MyUWF > SCOOP.
- Consistent access to the internet is required to participate in online courses. A high-speed internet connection is required for an optimal experience while using Argo Apps.
- Optionally, students may install ArcGIS Pro software locally which is used in all GIS certificate courses. Students' computers should meet the minimal hardware requirements for Esri ArcGIS Pro software (see the most current version of the software). Please note: ArcGIS Pro runs natively on Windows OS. Mac users can use ArcGIS Pro on Argo Apps or run ArcGIS Pro via Bootcamp.
- Previous knowledge or experience in GIS is not required but it's important to possess both Minimal Technology Skills and Requirements and Basic Computer Skills for GIS. This is a very technical program and we will not have time to teach basic skills.
- Certain aspects of GIS software require students to have sight and hand-eye coordination (certain abilities) to practice GIS and use the software (any GIS software). If you have a disability that impacts full participation in a course please contact the Student Accessibility Resources at 850-474-2387 or by email, at [sar@uwf.edu](mailto:sar@uwf.edu) for additional support.

- All materials and communication will be conducted in the English language. A guide for GIS students on how to Get Help Faster is provided as part of the GIS User Training to demonstrate good communication in our online courses. Instructors may request a specific communication protocol for their courses which will be provided on the course syllabus or course site. Adhering to basic computer ethics and professionalism is expected.

## Admission Requirements

- Graduate Non-Degree Seeking Application.
- *Current UWF graduate students interested in completing the graduate certificate are not required to complete the non-degree seeking application but will need to contact the GIS academic advisor to review their degree audit and initiate the declaration of the certificate process.*
- Proof of a Bachelor's degree from a post-secondary institution accredited by an agency recognized by the United States Department of Education. Unofficial transcripts are acceptable. If you've taken college GIS courses at an accredited institution, submit relevant course syllabi for consideration for foundational GIS course credit. Normally, transfer courses cannot be used to satisfy the core course requirements for completion of a graduate certificate.
- Submit a letter of intent demonstrating graduate-level motivation and writing abilities. Discuss your interest in the field of GIS, why you chose to apply, and how your career goals match with the UWF online Graduate GIS Certificate.
- Resume or CV.
- Agree to possess the prerequisite skills, hardware, access, and abilities for GIS.
- International non-degree seeking applicants must meet the English proficiency requirement established by the University.

Inquiries should be addressed to [gisonline@uwf.edu](mailto:gisonline@uwf.edu). All students entering the program must meet with an advisor to develop a degree plan.

## Course Requirements

### Foundational Proficiencies

Candidates are expected to have completed the equivalent of the following foundational proficiency courses. Courses that are not compliant with UWF's 6-year time-to-degree policy must be reviewed to determine proficiency. Foundation courses and core courses may be taken concurrently pending department approval.

GIS 5050 & 5050L	Geographic Information Systems and Geographic Information Systems Lab	4
GIS 5007 & 5007L	Computer Cartography and Computer Cartography Lab	4
GIS 5027 & 5027L	Aerial Photography and Remote Sensing and Aerial Photography and Remote Sensing Lab	4
<b>Total Hours</b>		<b>12</b>

### Core Courses

Students are required to complete the following core courses. A grade of "C" or better is required for all program courses. A minimum 3.0 GPA is required to be awarded the GIS Certificate.

GIS 5103	GIS Programming	3
GIS 5100	Applications in Geographic Information Systems	3
GIS 5935	Special Topics in Geographic Science	3
Choose three semester hours from the following:		3
GIS 5945	GIS Internship	
GIS 6905	GIS Directed Study	
<b>Total Hours</b>		<b>12</b>