

# GEOGRAPHIC INFORMATION SCIENCE AND TECHNOLOGY (MASTER OF SCIENCE)

Students accepted to the MS with a major in Geographic Information Science and Technology, must decide on a track, either Non-Thesis or Thesis. Students must meet with the Geographic Information Science and Technology graduate program coordinator to discuss degree benchmarks and determine a track of study prior to admission into the program. An advisory committee will be selected to assist the student in developing a degree plan that satisfies university and departmental degree requirements. Requirements and benchmarks for Non-Thesis and Thesis tracks are available on the JSU Chemistry and Geosciences Department website and in the Chemistry and Geoscience office.

## Applications Deadlines

Deadline dates for applications:

Date	Event
July 1	Fall Admission
November 1	Spring Admission
April 1	Summer Admission

The graduate program chair and the Department Chair must grant any exceptions to these deadlines.

## Application Materials required for the Master of Science with a Major in Geographic Information Science & Technology

All applicants must submit the following documentations to Graduate Admissions to be considered for admission:

Graduate Admissions  
Jacksonville State University  
700 Pelham Road North  
Jacksonville, Alabama 36265-1602

1. Completed JSU Graduate Applications for Admission.
2. Non-refundable \$35.00 application processing fee.
3. Official transcripts from the baccalaureate degree awarding institution and **all** transcripts from institutions where post-baccalaureate work has been completed. To be considered for admission, applicants must hold a degree from an institutionally accredited institution or its foreign equivalent. (Students who have previously attended JSU do not need to request a transcript from the university.)
4. Three Graduate References Forms completed by individuals who can provide qualitative assessment of the applicant's potential for success in graduate coursework. Reference forms will be submitted electronically. Instructions for submission will be sent through email to the applicant upon submission of the online graduate application.
5. International student applicants must see the International Student Applicants section of this catalog for other application and enrollment requirements.

## Admission Requirements for the MS with a Major in Geographic Information Science and Technology

Applicants to the MS with a major in Geographic Information Science and Technology must meet both the Graduate School requirements and the Geosciences Departmental requirements.

Applicants to the MS with a major in Geographic Information Science and Technology are not required to have an undergraduate major in Geography or Geospatial Technology. Without a foundation in GIS or Geospatial Technology, additional courses may be suggested as foundational courses. These courses may not count for credit toward the MS GIST. Applicants with no GIS background will be required to take GIS 5510 Introduction to Spatial Analysis (3) as an introductory foundational course.

### Unconditional Admission

To obtain unconditional admission into the MS in Geographic Information Science and Technology program applicants must meet the following requirement

- A minimum overall undergraduate GPA of 2.50 including a minimum GPA of 3.00 in their major.

### Conditional Admission

An applicant may be conditionally admitted with the recommendation of a graduate faculty sponsor(s) and the approval of the graduate program committee and the department head.

Applicants who are granted conditional admission must meet immediately with Dr. Joe Morgan, the Chemistry and Geosciences Department Head, to discuss program benchmarks and timelines. The student must also achieve a GPA of at least 3.0 on the first 12 graduate hours attempted. Failure to meet these conditions will result in the student being dropped from graduate studies.

## Minimum Requirements for the MS with a Major in Geographic Information Science and Technology

An overall 3.00 GPA is required on all coursework attempted for this master's degree. Transfer credit cannot be used to raise the GPA to the required 3.00.

The required courses for the non-thesis and the thesis options are the same and will serve as foundational courses for the degree. The elective courses may vary depending on the research topics and the methodology chosen for each. The non-thesis option requires the completion of a comprehensive project and the thesis option requires the completion of an approved thesis focused on original research under the direction and approval of a comprehensive thesis committee.

The 36 semester hours for the thesis and non-thesis option will include the following courses:

Graduate students are required to take the following core courses in the Master of Science in Geographic Information Science and Technology for a total of 18 semester hours.

Course	Title	Credits
<b>Core Course Requirements</b>		
GIS 5510	Introduction to Spatial Analysis	3
GIS 5520	Spatial Data Collection and Management	3
GIS 5530	Spatial Data, Layout, and Design	3
GIS 5540	Geospatial Programming	3
GIS 5550	Digital Image Analysis	3
GIS 5560	Organization and Management of Spatial Systems	3
<b>Electives <sup>1</sup></b>		<b>12</b>
Students may take any graduate level GY or GIS courses listed in the catalog as electives in consultation with their graduate advisor.		
<b>Capstone or Thesis <sup>2</sup></b>		<b>6</b>
GIS 5980	Capstone Project	
GIS 5990	Thesis	
<b>Total Hours</b>		<b>36</b>

**Graduate Semester hours required for this Degree is 36 for either the Capstone or the Thesis option.**

<sup>1</sup> Student, in consultation with their graduate advisor or committee chair will select four courses from elective options (excluding GIS 5980 Capstone Project (3) and GIS 5990 Thesis (3)).

<sup>2</sup> Depending on the selection of a Thesis or Non-Thesis option, the student is required to choose either the Capstone Option (Non-Thesis) or the Thesis option for 6 hours. The capstone or the thesis option must be taken in the last year. If longer is required the student must take it until they complete either their project or their thesis.

## Non-Thesis Option (Geospatial Capstone Project)

A minimum of 36 graduate semester hours (18 of which must be at the 5100 level or higher), including successful completion of Geospatial Capstone Project. The GIS capstone project courses are the final courses in your GIST program. These courses give the graduate student an opportunity to apply the skills learned and refined during their studies. A GIST capstone project immerses one in a wide range of tasks that are associated with the application of GIST. The GIST capstone is completed under the advisement of the student's graduate advisor or committee chair. To be considered complete, the student must present their final Capstone Project at a local, regional, national, international or University conference or colloquium.

## Thesis Option

An approved thesis for this option is required for the Master of Science in Geographic Information Science and Technology for the student selecting the thesis option. A finished work must reflect a comprehensive understanding of the pertinent literature and clearly express the problem(s) for the study, the method(s), and the significance and results of the student's original research.

A minimum of 36 graduate semester hours (18 hours must be at the 5100 level or higher), including successful completion of an acceptable thesis. The successful defense of the thesis will serve as a comprehensive examination. The 36 graduate semester hours for the thesis option will include required and elective courses from above with guidance and approval of the committee chair.

See Thesis Options and Procedures (<https://catalog.jsu.edu/graduate/academic-policies-procedures/thesis-options-procedures/>) in this catalog for more information.

Students not meeting benchmarks may be provided additional time as determined by their thesis committee, the department chair, or the Dean of the Graduate School.

## Graduation and Comprehensive Exam

No comprehensive exam is required for the Non-Thesis Option (Capstone) of this degree. For students choosing the Thesis Option, the thesis defense serves as the comprehensive exam. All students must apply for graduation (<http://www.jsu.edu/graduate/graduation.html>) by the given deadline of the semester (<http://www.jsu.edu/registrar/academic-calendar/>) in which they plan to graduate. Please see the Graduation and Comprehensive Exam (<https://catalog.jsu.edu/graduate/academic-policies-procedures/graduation-comprehensive-exam/>) section of this catalog for more information.