

Geographic Information Science, BS

LAGISBS


Learn skills to better understand the concept of location as it relates to current issues facing our global society, and be ready to help solve some of the most pressing challenges facing our world.

Program description

Students in the BS program in geographic information science begin their study by gaining a strong foundational understanding of geographic information systems, statistical analysis and computer programming. Students expand on this foundation through upper-division coursework in the major that enables a pursuit of deeper and more focused understanding of the application of geographic information science technologies to complex environmental and societal issues.

In addition to the guidelines in the Concurrent Program Options section below, students interested in pursuing concurrent or second baccalaureate degrees in The College of Liberal Arts and Sciences are advised to visit [The College's website](#) for more information and requirements.

At a glance

- **College/School:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe](#) or [Online, ASU Local](#)
- **Second language requirement:** No
- **First required math course:** MAT 170 - Precalculus
or MAT 117 College Algebra
- **Math intensity:** Moderate 

Required courses (Major Map)

[2024 - 2025 Major Map \(on-campus\)](#)

[2024 - 2025 Major Map \(online\)](#)

[Major Map \(Archives\)](#)

Concurrent program options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

Accelerated program options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an [accelerated bachelor's plus master's degree](#) with:

[Urban and Environmental Planning, MUEP](#)

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program. Interested students can learn about eligibility requirements and [how to apply](#).

Admission requirements

General university admission requirements:

All students are required to meet general university admission requirements.

[First-year](#) | [Transfer](#) | [International](#) | [Readmission](#)

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

Change of Major Requirements

A current ASU student has no additional requirements for changing majors.

Students should visit the [Change of Major form](#) for information about how to change a major to this program.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

ASU Local

It is now possible to earn an ASU degree with [ASU Local](#), an integrated college experience in which students take advantage of in-person success coaching and programming experiences on site while completing one of 130+ undergraduate online degree programs, all of which come with online faculty interaction and tutoring support.

Transfer options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use [MyPath2ASU®](#) to outline a list of recommended courses to take prior to transfer.

ASU has [transfer partnerships](#) in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey.

Global opportunities

Global experience

Students have the opportunity to apply their knowledge of geographic information science in a new and different setting through [study abroad](#). Students can gain a deeper understanding of the complex societal and environmental issues that influence the uses of GIS.

Students' resumes are enhanced with the heightened skills in cultural competency, communication and critical thinking acquired through study abroad.

Career opportunities

Graduates of geographic information science pursue opportunities in both the private and public sectors. Careers include:

- cartographers and photogrammetrists
- geographic information system technicians
- geospatial information scientists and technologists
- location analysts
- mapping technicians

- remote sensing scientists and technologists

Example job titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience and geographical location may affect pay scales. Some jobs also may require advanced degrees, certifications or state-specific licensure.

Career	*Growth	*Median salary
<u>Cartographer (Map Maker)</u> ☀	5.0%	\$71,890
<u>Data Scientist</u> ☀	35.2%	\$103,500
<u>Forest Ranger</u> ☀	14.8%	\$48,110
<u>Geodetic Surveyor</u> ☀	4.6%	\$63,080
<u>Geographic Information Systems Analyst (GIS Analyst)</u>	1.1%	\$88,900
<u>Geographic Information Systems Technician (GIS Technician)</u> ☀	9.7%	\$98,740
<u>Geospatial Intelligence Analyst</u>	2.1%	\$107,970
<u>Intelligence Officer</u>	1.5%	\$86,280
<u>Traffic Analyst</u>	3.5%	\$50,050
<u>Urban Planner</u>	3.7%	\$79,540

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

☀ [Bright Outlook](#)

Professional licensure

ASU programs that may lead to professional licensure or certification are intended to prepare students for potential licensure or certification in Arizona. Completion of an ASU program may not meet educational requirements for licensure or certification in another state. For more information, students should visit the [ASU professional licensure](#) webpage.

Contact information

[Schedule an advisor appointment](#)

[School of Geographical Sciences and Urban Planning](#) | COOR 5681

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