Geographic Information Science, BS

Geographic information science is being used to solve some of the most pressing challenges facing our world. In this program, you'll learn skills that allow you to understand the increasingly important concept of location in issues facing our global society.

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 the 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.

https://thecollege.asu.edu/concurrent-and-second-baccalaureate-degrees

At a Glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe or Online, ASU Local
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 170 - Precalculus
  or MAT 117 College Algebra
- **Math Intensity:** Moderate
Required Courses (Major Map)

2022 - 2023 Major Map (On-campus)
2022 - 2023 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 and master's degree with:

Urban and Environmental Planning, MUEP

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.

Admission Requirements

General University Admission Requirements:
All students are required to meet general university admission requirements.  
First-year | Transfer | International | Readmission

Change of Major Requirements

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

Students should refer to https://changemajor.apps.asu.edu 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 description and request more information here.

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. Those interested may learn more about ASU Local here.

**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. Students may learn more about these programs by visiting the admission site: [https://admission.asu.edu/transfer/MyPath2ASU](https://admission.asu.edu/transfer/MyPath2ASU).

**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 while enhancing their resumes with heightened skills in cultural competency, communication and critical thinking. [https://goglobal.asu.edu/](https://goglobal.asu.edu/)

**Career Opportunities**

Graduates in geographic information science pursue career opportunities in both the private and public sectors. Some of the career opportunities for graduates of the Bachelor of Science program in geographic information science include:

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

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.
<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartographer (Map Maker)</td>
<td>4.5%</td>
<td>$68,380</td>
</tr>
<tr>
<td>Data Scientist</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>Forest Ranger</td>
<td>24.3%</td>
<td>$42,150</td>
</tr>
<tr>
<td>Geographic Information Systems Analyst (GIS Analyst)</td>
<td></td>
<td>$85,430</td>
</tr>
<tr>
<td>Geographic Information Systems Technician (GIS Technician)</td>
<td>5.7%</td>
<td>$92,870</td>
</tr>
<tr>
<td>Geospatial Intelligence Analyst</td>
<td></td>
<td>$107,210</td>
</tr>
<tr>
<td>Intelligence Officer</td>
<td>1.1%</td>
<td>$86,940</td>
</tr>
<tr>
<td>Special Forces Officer</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>Traffic Analyst</td>
<td>6.0%</td>
<td>$47,800</td>
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<tr>
<td>Urban Planner</td>
<td>11.0%</td>
<td>$75,950</td>
</tr>
</tbody>
</table>

* 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  Green Occupation

**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: [https://admission.asu.edu/academics/licensure](https://admission.asu.edu/academics/licensure).

**Contact Information**

Schedule an advisor appointment  
School of Geographical Sciences and Urban Planning | COOR 5681  
SGSUP.advising@asu.edu | 480-965-7533