Applied Mathematics, BS

Program Description

The BS in applied mathematics is an interdisciplinary program that provides a broad and rigorous foundation in applied mathematics. It includes a foundation in computing and statistics as well as both theoretical and applied mathematics.

The program emphasizes quantitative problem-solving and critical thinking through courses that expose students to a variety of mathematical theories, techniques and applications currently used by analysts and researchers in government, industry and nonprofit organizations.

This major is eligible for the Western Undergraduate Exchange program at the following location: West campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150% of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of the WUE program.

At a Glance

- **College/School:** [New College of Interdisciplinary Arts and Sciences](#)
- **Location:** West campus [WUE](#)
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 270 - Calculus w/Analytic Geometry I
- **Math Intensity:** Substantial

Required Courses (Major Map)

[2022 - 2023 Major Map](#)
[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:

*Biological Data Science, MS*

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.

For information about how to change a major to this program.

**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 enhance their resumes and gain valuable experience through study abroad. With over 250 programs available, study abroad allows students to tailor their experience to their unique interests and skill sets. Students in applied mathematics are able to gain hands-on experience in programs such as a summer in Colombia or a semester in Ireland. In a competitive field, students stand out with the heightened cultural competency and leadership and critical thinking skills they achieved when studying abroad. More information on available programs can be found on the Global Education website.  
https://goglobal.asu.edu/

Career Opportunities

Graduates are prepared for entry-level positions in industry, finance, government, nonprofit organizations and education. They also may pursue advanced degrees in the mathematical sciences (e.g., mathematics, statistics and computer science), and their career opportunities include:

- applied mathematical networks
- financial mathematics
- general applied mathematics
- mathematical biology
- operations research

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>Bioinformatics Scientist</td>
<td>2.2%</td>
<td>$85,290</td>
</tr>
<tr>
<td>Biostatisticist</td>
<td>34.6%</td>
<td>$92,270</td>
</tr>
<tr>
<td>Business Intelligence Analyst</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Clinical Data Manager</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>Health Sciences Manager</td>
<td>4.8%</td>
<td>$137,940</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>3.8%</td>
<td>$62,870</td>
</tr>
<tr>
<td>Hydrogeologist</td>
<td>4.8%</td>
<td>$137,940</td>
</tr>
<tr>
<td>Mathematician</td>
<td>3.0%</td>
<td>$110,860</td>
</tr>
<tr>
<td>Molecular Biologist</td>
<td>2.2%</td>
<td>$85,290</td>
</tr>
<tr>
<td>Statistician</td>
<td>34.6%</td>
<td>$92,270</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