Applied Mathematics, BS

ASMATBS

Gain a broad and rigorous foundation in mathematics that will enable you to solve complex, real-world problems. Grow your knowledge and skill set in computing and statistics as well as theoretical and applied mathematics.

Program Description

The BS program in applied mathematics 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 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)

2023 - 2024 Major Map
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:

Biological Data Science, MS

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 college, 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.

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
Study abroad enables students in applied mathematics to gain valuable hands-on experience in another part of the world. With more than 300 programs available, they can tailor their experience to their unique interests and skill sets.

Participation in study abroad provides students with the heightened cultural competency and leadership and critical thinking skills that will enhance their resumes and help them stand out in a competitive career field.

More information on available programs can be found on the Global Education Office website.

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 may involve:

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

Career example titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience, geographical location, and required advanced degrees or certifications may affect pay scales.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioinformatics Scientist</td>
<td>3.9%</td>
<td>$87,300</td>
</tr>
<tr>
<td>Biostatistician</td>
<td>31.6%</td>
<td>$98,920</td>
</tr>
<tr>
<td>Business Intelligence Analyst</td>
<td>35.2%</td>
<td>$103,500</td>
</tr>
<tr>
<td>Clinical Data Manager</td>
<td>35.2%</td>
<td>$103,500</td>
</tr>
<tr>
<td>Health Sciences Manager</td>
<td>4.8%</td>
<td>$144,440</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>1.0%</td>
<td>$62,360</td>
</tr>
<tr>
<td>Hydrogeologist</td>
<td>4.8%</td>
<td>$144,440</td>
</tr>
<tr>
<td>Career</td>
<td>Change</td>
<td>Salary</td>
</tr>
<tr>
<td>-----------------------------</td>
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</tr>
<tr>
<td>Mathematician</td>
<td>2.2%</td>
<td>$112,110</td>
</tr>
<tr>
<td>Molecular Biologist</td>
<td>3.9%</td>
<td>$87,300</td>
</tr>
<tr>
<td>Statistician</td>
<td>31.6%</td>
<td>$98,920</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

**Contact Information**

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