Applied Mathematics, BS

Apply your passion and talent for math to contexts in business and industry as well as the biological, physical and social sciences. Acquire an arsenal of tools and learn to build cross-discipline connections to solve real-world challenges.

Program Description

The BS in applied mathematics offered by the College of Integrative Sciences and Arts is a transdisciplinary program focused on developing flexible problem-solvers who can apply mathematical techniques and skills to a wide range of problems in the sciences, such as biology, social sciences, chemistry, physics and engineering.

The coursework builds a foundation in mathematical modeling, data analysis and the interpretation of mathematical results in real-world settings. Students choose electives in the sciences, technology, engineering or other areas of interest to complement and provide context for their mathematical training.

At a Glance

- **College/School**: College of Integrative Sciences and Arts
- **Location**: Polytechnic campus
- **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)

2020 - 2021 Major Map
Major Map (Archives)
Admission Requirements

General University Admission Requirements:

All students are required to meet general university admission requirements.

Freshman | Transfer | International | Readmission

Change of Major Requirements

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

Students should refer to https://changingmajors.asu.edu/request 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 the Transfer Map search 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 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/pathway-programs.

Global Opportunities

Global Experience

With over 250 programs in more than 65 countries (ranging from one week to one year), study abroad is possible for all ASU students wishing to gain global skills and knowledge in preparation for a 21st-century career. Students earn ASU credit for completed courses, while staying on track for graduation, and may apply financial aid and scholarships toward program costs. https://mystudyabroad.asu.edu/

Career Opportunities
Graduates of this program are prepared to apply their analytic skills and technical knowledge to problems in a range of careers in industry, government, education or nonprofit organizations. They also pursue advanced degrees in the mathematical sciences (e.g., mathematics, statistics and applied mathematics such as in mathematical biology).

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>Actuary (Financial Risk Analyst)</td>
<td>22.5%</td>
<td>$101,560</td>
</tr>
<tr>
<td>Bioinformatics Scientist</td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td>Biostatistician</td>
<td>33.8%</td>
<td>$84,060</td>
</tr>
<tr>
<td>Health Sciences Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>7.5%</td>
<td>$59,170</td>
</tr>
<tr>
<td>Mathematician</td>
<td>29.7%</td>
<td>$103,010</td>
</tr>
<tr>
<td>Molecular Biologist</td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td>Photonic Engineer</td>
<td>6.4%</td>
<td>$97,250</td>
</tr>
<tr>
<td>Statistician</td>
<td>33.8%</td>
<td>$84,060</td>
</tr>
<tr>
<td>Validation Engineer</td>
<td>6.4%</td>
<td>$97,250</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

**Contact Information**

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