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. You'll acquire an arsenal of tools and learn to build cross-discipline connections to solve real-world challenges.

Program Description

The BS degree program 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**: No
- **Second Language Requirement**: No
- **First Required Math Course**: MAT 270 - Calculus w/Analytic Geometry I
- **Math Intensity**: Substantial

Required Courses (Major Map)

2018 - 2019 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 see https://students.asu.edu/changingmajors for information about how to change the major to this program.

Transfer Agreements

ASU has partnered with colleges and universities in Arizona, California, Illinois and Washington to provide transfer curriculum pathways. Students should select their current institution to see if there is a partnership agreement between the institution and ASU for this degree program. Students who do not see their state or institution listed should check back as ASU is always working on creating new partnerships.

Transfer from a Maricopa Community College in Arizona

Select a college

- Chandler-Gilbert Community College
- Estrella Mountain Community College
- GateWay Community College
- Glendale Community College
- Mesa Community College

Transfer from an Arizona Community College

Select a college

- Arizona Western College
- Central Arizona College
- Cochise College
- Coconino Community College
- Dine College
- Eastern Arizona College
- Gila Community College
- Mohave Community College

Transfer from another state

Select a state

- California
- Illinois
- Washington
- Another state
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/](https://mystudyabroad.asu.edu/).

Career Opportunities

Students in 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>Occupation</td>
<td>Growth Rate</td>
<td>Salary</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------</td>
<td>------------</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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