# Applied Mathematics, BS

LSMATBS

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-disciplinary connections so you can help solve today's 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 applicable 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
- Second language requirement: No
- First required math course: MAT 270 Calculus w/Analytic Geometry I or MAT 265 Calculus for Engineers
- Math intensity: Substantial

## **Required courses (Major Map)**

2024 - 2025 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.

## **Admission requirements**

#### General university admission requirements:

All students are required to meet general university admission requirements. <u>First-year</u> | <u>Transfer</u> | <u>International</u> | <u>Readmission</u>

# **Tuition information**

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> 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 <u>Change of Major form</u> 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 <u>MyPath2ASU®</u> to outline a list of recommended courses to take prior to transfer.

ASU has <u>transfer partnerships</u> 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**

Students gain valuable experience when studying abroad, which will enhance their resumes. Students often cite participating in <u>Global Education programs</u> as the highlight of their academic career and a crucial moment in helping them gain a clearer view of the world, its peoples and the complex challenges facing us all.

The Global Education Office offers a suite of faculty-directed global experience programs designed to connect students with modern issues that impact local communities yet transect borders. Through any of the more than 300 programs available, students can see the world as they never have before and come away with memories to last a lifetime. Graduates who possess the heightened cultural competency and leadership and critical thinking skills acquired through studying abroad may stand out in a competitive field.

The College of Integrative Sciences and Arts recommends <u>these programs</u> for students majoring in applied mathematics.

#### **Career opportunities**

Graduates are prepared to apply their analytical 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 mathematical biology).

Example job titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience and geographical location may affect pay scales. Some jobs also may require advanced degrees, certifications or state-specific licensure.

Career	*Growth	*Median salary
<u>Actuary (Financial Risk Analyst)</u> 🔷	23.2%	\$113,990
Bioinformatics Scientist	3.9%	\$87,300
Biostatistician 🧶	31.6%	\$98,920
Health Sciences Manager 🧅	4.8%	\$144,440
High School Teacher	1.0%	\$62,360
Mathematician	2.2%	\$112,110
Operations Research Analyst 🤗	22.5%	\$85,720
Photonic Engineer	3.3%	\$104,600
Statistician 🤗	31.6%	\$98,920
Validation Engineer 🧇	11.7%	\$96,350

\* Data obtained from the Occupational Information Network (O\*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).



# **Contact information**

School of Applied Sciences and Arts | SANCA 233 CISA@asu.edu | 480-727-1526