# Mathematics, BS

LAMATBS

Attain an extensive education in mathematics and a background focused in science and technology. Professionals with a combination of mathematical skills and a strong background in the sciences are in high demand in a wide variety of STEM fields.

## Program description

In the Bachelor of Science program in mathematics, students acquire a deep grounding in both theoretical and applied mathematical concepts. Courses cover a broad spectrum of advanced mathematical topics, including differential equations, modeling, numerical analysis, number theory, topology, cryptography and real analysis. This degree focuses on the highest levels of math offered in undergraduate courses and is recommended for those who are considering a graduate degree in mathematics.

This degree pairs well with several other areas of study in a variety of fields, including computer science, physics, astrophysics and engineering, as well as economics, business, music and art.

In addition to reviewing the guidelines in the Concurrent Program Options section below, students interested in pursuing concurrent or second baccalaureate degrees in The College of Liberal Arts and Sciences are advised to visit The College's website for more information and requirements.

**STEM-OPT for international students on F-1 visas**

This program may be eligible for an Optional Practical Training extension for up to 24 months. This OPT work authorization period may help international students gain skills and experience in the U.S. Those interested in an OPT extension should review ASU degrees that qualify for the STEM-OPT extension at ASU's International Students and Scholars Center website.

The OPT extension only applies to students on an F-1 visa and does not apply to students completing a degree through ASU Online.

## At a glance

- **College/school:** The College of Liberal Arts and Sciences
- **Location:** Tempe

- **Second language requirement:** No
- **STEM-OPT extension eligible:** Yes
- **First required math course:** MAT 270 - Calc w/Analytic Geometry I
- **Math intensity:** Substantial

# Curriculum

# 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:

Mathematics, MA

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 higher education, 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.

## Program learning outcomes

Program learning outcomes identify what a student will learn or be able to do upon completion of their program. This program has the following program outcomes:

- Analyze quantitative problems and draw conclusions by applying proper mathematical theories.
- Synthesizing definitions and previous theoretical results to draw new conclusions and prove them.
- Apply concepts from advanced mathematics to solve real-world problems in STEM fields

## Global opportunities

**Global experience**

Each of the more than 300 [Global Education program](#) options provides an opportunity for students to develop a valuable skill set that can give them an advantage in their career and personal enrichment.

Whether in a foreign country, in the U.S. or online, students are encouraged to build communication skills, challenged to adapt and persevere, and exposed to differences across the world as they increase their ability to work with diverse groups of people. Graduates who have heightened cultural competence, and leadership and critical thinking skills acquired through study abroad may stand out in a competitive job market.

## Career opportunities

Graduates with a BS degree in mathematics go on to careers in areas such as research, computer science, cybersecurity, law, finance, biotechnology, government, engineering, health care and education. Additionally, graduates have a strong foundation to pursue further mathematical studies.

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 |
|---|---|---|
| **Bioinformatics Scientist** | 3.9% | $87,300 |
| **Computer Scientist** 🏅 | 22.7% | $136,620 |
| **Data Analyst** | -1.7% | $48,880 |
| **Financial Analyst** 🏅 | 7.6% | $95,080 |
| **High School Teacher** | 1.0% | $62,360 |

| | | |
|---|---|---|
| **Information Security Analyst** ☀ | 31.5% | $112,000 |
| **Mathematician** | 2.2% | $112,110 |
| **Mathematics Professor** | 3.2% | $77,420 |
| **Operations Research Analyst** ☀ | 22.5% | $85,720 |
| **Statistician** ☀ | 31.6% | $98,920 |

* 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

School of Mathematical and Statistical Sciences | WXLR 216
math@asu.edu
480-965-7195