Mathematics (Statistics), BS

LAMATTBS

Gain the skills to become a successful statistician and apply statistical methods and models to solve practical problems. Learn how to gather, analyze and interpret data to aid in many decision-making processes.

Program description

Statistics involves identifying relevant details of data and how to best collect that data to make reliable conclusions. The BS program in mathematics with a concentration in statistics provides a strong math background with a focus on statistics. Flexibility is built into this program so that students have the freedom to explore other mathematical areas of interest.

Using statistical methods, students discover how to generate insights that inform fact-based decision-making and research through statistical inference and controlled experimentation. They use cutting-edge techniques to study and explore strategies for dealing with uncertainty.

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 <u>The College's website</u> for more information and requirements.

At a glance

- College/School: The College of Liberal Arts and Sciences
- Location: <u>Tempe</u>
- Second language requirement: No
- First required math course: MAT 270 Calculus w/Analytic Geometry I
- Math intensity: Substantial

Required courses (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:

Statistics, 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 <u>how to apply</u>.

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 <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.

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:

- Devise strategies that leverage the proper mathematical and statistical tools for application to the analysis of data.
- Perform statistical analysis of data, in order to draw valid conclusions.
- Perform the process of analyzing quantitative problems and drawing conclusions by applying proper mathematical theories.

Global opportunities

Global experience

Whether in a foreign country, in the U.S. or online, Global Education programs encourage students to build communication skills, challenge them to adapt and persevere, expose them to differences across the world and increase their ability to work with diverse groups of people.

Each of the more than 300 <u>Global Education program</u> options provides an opportunity for students to develop a valuable skill set that can give them an advantage in their career as well as personal enrichment. Graduates who possess the heightened cultural competency, and leadership and critical thinking skills acquired through study abroad may stand out in a competitive field.

Career opportunities

Based on factors such as pay, growth and job satisfaction, statistics has been named in separate job reports as one of the best careers, and statistical analysis and data mining have been identified as two of the most desirable skills in today's job market.

The U.S. Bureau of Labor Statistics projects 32% employment growth for statisticians by 2031. The role of statistical thinking is exploding in many important areas, such as biostatistics, business analytics and the social sciences. For students pursuing a bachelor's degree in mathematics with a concentration in statistics, that means an exciting future of career opportunities in fields including:

- biostatistics
- business
- economics
- engineering

- finance
- government
- marketing
- sports
- technology

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
Biostatistician 🧶	31.6%	\$98,920
<u>Clinical Data Manager 🤍</u>	35.2%	\$103,500
<u>Clinical Trial Manager 🍳</u>	4.8%	\$144,440
Field Researcher		\$60,410
<u>Market Research Analyst 🤷</u>	13.4%	\$68,230
Mathematician	2.2%	\$112,110
<u>Risk Manager 🌼</u>	8.2%	\$102,120
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

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