Actuarial Science, BS

LAACTBS

Learn to examine risk through the lens of mathematics, so you can enjoy a career in which you can provide creative solutions that minimize risk and maximize reward.

Program Description

Actuarial science students learn to use tools from mathematics, statistics and finance to measure the impact of risk in order to improve forecasting and decision-making.

The BS degree program in actuarial science provides students with the preparation necessary for the required professional actuarial credentialing exams offered by the Society of Actuaries and the Casualty Actuarial Society.

In addition to 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.

https://thecollege.asu.edu/concurrent-and-second-baccalaureate-degrees

At a Glance

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

2022 - 2023 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.

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 and master's degree with:

Actuarial Science, MS

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.

Admission Requirements

General University Admission Requirements:
All students are required to meet general university admission requirements.

| First-year | Transfer | International | Readmission |

Change of Major Requirements

Current ASU students wishing to change their major to actuarial science should have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A"), have completed at least MAT 265 or MAT 270 and CIS 105 (or CSE 100 or CSE 110), and have earned a "B" grade or better in all critical classes they have already completed.

Students should refer to https://changemajor.apps.asu.edu 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. Students may learn more about these programs by visiting the admission site: [https://admission.asu.edu/transfer/MyPath2ASU](https://admission.asu.edu/transfer/MyPath2ASU).

**Global Opportunities**

**Global Experience**

Students are able to enhance their resumes with the heightened cultural competency, leadership, critical thinking skills and valuable experience they acquire through study abroad.

With over 250 programs available, study abroad allows students to tailor their experience to their unique interests and skill sets. Some examples of student experiences abroad in this area include a summer in Colombia and a semester in Ireland. More information is available on the Global Education website. [https://goglobal.asu.edu/](https://goglobal.asu.edu/)

**Career Opportunities**

Risk is a part of daily life and wherever there is risk, there are opportunities for actuarial intervention. Many actuaries work with insurance companies to calculate premiums, determine reserves needed to ensure an organization's financial health and to ensure organizations conform to stringent, complex legal mandates. Others help companies to establish retirement plans or are employed as consultants.

Graduates with a BS in actuarial science possess skills that are transferable to any industry and any organization that requires risk modeling and management, including:

- colleges and universities
- consulting firms
- energy, such as utilities, oil and gas
- environment (on issues such as climate change and the financial impact or risk of extreme events)
- financial services, such as banking and investment management
- government agencies such as Social Security, the Department of Labor and Medicare (to manage social programs and to develop regulations and legislation)
- insurance companies
- retirement and pensions
- transportation, such as shipping and air travel

Students can also apply the advanced problem-solving skills learned in the actuarial science undergraduate program to a variety of other professional careers, including:

- analysts
- business operations specialists
- consultants
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><strong>Actuary (Financial Risk Analyst)</strong></td>
<td>17.6%</td>
<td>$111,030</td>
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<tr>
<td><strong>Business Intelligence Analyst</strong></td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td><strong>Compliance Manager</strong></td>
<td>not available</td>
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<tr>
<td><strong>Economist</strong></td>
<td>14.1%</td>
<td>$108,350</td>
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<tr>
<td><strong>Financial Analyst</strong></td>
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</tr>
<tr>
<td><strong>Insurance Claims Investigator</strong></td>
<td>$68,270</td>
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<tr>
<td><strong>Insurance Underwriter</strong></td>
<td>$71,790</td>
<td></td>
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<tr>
<td><strong>Investment Fund Manager</strong></td>
<td>15.5%</td>
<td>$134,180</td>
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<tr>
<td><strong>Loan Officer</strong></td>
<td>3.2%</td>
<td>$63,960</td>
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<tr>
<td><strong>Statistician</strong></td>
<td>34.6%</td>
<td>$92,270</td>
</tr>
</tbody>
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* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

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