Actuarial Science, BS

Actuaries are the analytical backbone of any institution concerned with projections of profit and risk. Actuarial science is consistently ranked among the top professions in terms of work employment outlook, job security and salary. With a degree in actuarial sciences, you can find careers with banks, universities, accounting firms and government agencies.

Program Description

The BS program in actuarial science at ASU provides the tools to succeed in this dynamic career.

Actuarial science majors learn to use tools from mathematics, statistics and finance to measure the impact of risk in order to improve forecasting and decision-making in business and government. Actuaries must pass a series of intensive professional exams to become credentialed, and this degree program prepares students for these exams.

Actuaries enjoy an excellent starting salary, exceptional job security with numerous opportunities for career growth.

At a Glance

• **College/School:** College of Liberal Arts and Sciences
• **Location:** Tempe campus

• **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)

2018 - 2019 Major Map
Major Map (Archives)

Accelerated Degrees

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 will be advised by their academic departments to apply.

Admission Requirements

General University Admission Requirements:

All students are required to meet general university admission requirements.
Freshman | Transfer | International | Readmission

Change of Major Requirements

Current ASU students wishing to change their major to actuarial science should have a cumulative GPA of at least 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://students.asu.edu/changingmajors for information about how to change a 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.
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

Risk is a part of daily life, and wherever there is risk, there are opportunities to be an actuary. Many actuaries work with insurance companies to calculate premiums, determine reserves needed to ensure an organization’s financial health and to make sure organizations conform to stringent, complex legal mandates. Others help companies to establish retirement plans or are employed as consultants. With a Bachelor of Science degree in actuarial science, students acquire skills that are transferable to any industry and any organization that requires risk modeling and management, including:

- accounting firms
- colleges and universities
- 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)
- 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
- teachers

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>Business Intelligence Analyst</td>
<td>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td>Compliance Manager</td>
<td>8.0%</td>
<td>$105,610</td>
</tr>
<tr>
<td>Economist</td>
<td>6.3%</td>
<td>$102,490</td>
</tr>
<tr>
<td>Environmental Economist</td>
<td>6.3%</td>
<td>$102,490</td>
</tr>
<tr>
<td>Financial Aid Counselor</td>
<td>13.8%</td>
<td>$44,710</td>
</tr>
<tr>
<td>Financial Analyst</td>
<td>10.9%</td>
<td>$84,300</td>
</tr>
<tr>
<td>Occupation</td>
<td>Salary</td>
<td>Change</td>
</tr>
<tr>
<td>--------------------------------</td>
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</tr>
<tr>
<td>Insurance Agent</td>
<td>9.9%</td>
<td>$49,710</td>
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<tr>
<td>Insurance Claims Investigator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Underwriter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Fund Manager</td>
<td>8.0%</td>
<td>$105,610</td>
</tr>
<tr>
<td>Investment Underwriter</td>
<td>9.6%</td>
<td>$69,520</td>
</tr>
<tr>
<td>Regulatory Affairs Manager</td>
<td>8.0%</td>
<td>$105,610</td>
</tr>
<tr>
<td>Statistician</td>
<td>33.8%</td>
<td>$84,060</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**

Schedule an advisor appointment
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