Biotechnology and Bioenterprise, BS

In one of the fastest growing fields of study at ASU, you gain the skills you need to develop biotechnology innovations and thrive in the health sciences communities nationwide.

Program Description

The BS program in biotechnology and bioenterprise provides students with essential transdisciplinary and practical experience in biotechnology research. Students acquire the associated business and entrepreneurship skills needed for developing and marketing biotechnological innovations and solutions to problems that face the biotechnology and health sciences communities in Arizona, the nation and beyond.

The program emphasizes coursework in the biological, biomolecular and biotechnological sciences, which are key components that underpin biotechnology. Students may tailor the degree to their specific interests and aspirations through focus areas in biotechnology, bioentrepreneurship and biostatistics. The program is unique due to its focus on blending biotechnology and entrepreneurship.

This major is eligible for the Western Undergraduate Exchange program at the following location: West campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150% of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of the WUE program.

At a Glance

- **College/School:** New College of Interdisciplinary Arts and Sciences
- **Location:** West campus WUE
- **Additional Program Fee:** Yes
• **Second Language Requirement**: No
• **First Required Math Course**: First math varies depending on the focus area chosen.
• **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:

*Global Management, MGM*

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.

*Freshman | Transfer | International | Readmission*

### Change of Major Requirements

A current ASU student has no additional requirements for changing majors.

Students should refer to [https://changemajor.apps.asu.edu](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™](https://mypath2asu.asu.edu) 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**
When studying abroad, students gain valuable experience in diverse settings. Students deepen their understanding of biotechnology and bioenterprise by enhancing their knowledge of research methods across the globe and through exposure to global startups and how countries approach entrepreneurship. Those who study abroad gain heightened skills in communication, critical thinking and leadership that enhance their resumes and can give them a competitive edge in their chosen career field.
[https://goglobal.asu.edu/](https://goglobal.asu.edu/)

**Career Opportunities**
Graduates of this program are prepared for such careers as:

- bioentrepreneur
- cell biologist
- clinical trials manager
- educator
- laboratory researcher
- microbiologist
- patent agent
- portfolio manager
- project manager
- regulatory affairs manager

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>Bioinformatics Scientist</td>
<td>2.2%</td>
<td>$85,290</td>
</tr>
<tr>
<td>Biological Scientist (General)</td>
<td>2.2%</td>
<td>$85,290</td>
</tr>
<tr>
<td>Clinical Trial Manager</td>
<td>4.8%</td>
<td>$137,940</td>
</tr>
<tr>
<td>Data Management Specialist</td>
<td>4.8%</td>
<td>not available</td>
</tr>
<tr>
<td>Health Sciences Manager</td>
<td>4.8%</td>
<td>$137,940</td>
</tr>
<tr>
<td>Occupation</td>
<td>Growth Rate</td>
<td>Average Salary</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Mathematical Science Assistant</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>Medical and Health Services Manager</td>
<td>31.5%</td>
<td>$104,280</td>
</tr>
<tr>
<td>Microbiologist</td>
<td>3.1%</td>
<td>$84,400</td>
</tr>
<tr>
<td>Molecular Biologist</td>
<td>2.2%</td>
<td>$85,290</td>
</tr>
<tr>
<td>Scientist/Biochemist</td>
<td>4.0%</td>
<td>$94,270</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**

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