

Applied Biological Sciences (Applied Biological Sciences), BS

TSABSABS

Are you interested in [pre-med](#), pre-dental or other professional programs related to human health? Would you like to apply biology knowledge and lab skills to solve challenges and innovate? An applied biology major is great for making the cross-discipline connections you'll use in careers or advanced degrees.

Program description

The BS program in applied biological sciences offers students solid foundations in biology and related sciences while allowing them to focus on an area of special interest.


Students learn about fundamental principles such as movement of energy and matter, exchange of genetic information, as well as the structure and function of relationships that govern life processes. They also learn about ethical and policy challenges that can arise when applying biological principles to social issues.

In this program, students contextualize knowledge through experience-based learning activities, including:

- case studies
- faculty-guided research and service-learning projects
- field trips
- hands-on laboratories and field experience
- internships

This major is eligible for the Western Undergraduate Exchange program at the following location: Polytechnic 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:** [College of Integrative Sciences and Arts](#)
- **Location:** [Polytechnic](#) **WUE**
- **Second language requirement:** No
- **First required math course:** MAT 251 - Calculus for Life Sciences
- **Math intensity:** Moderate 

Required courses (Major Map)

[2024 - 2025 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 plus master's degree** with:

[Applied Biological Sciences, 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 [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.

Global opportunities

Global experience

With more than 300 programs available in more than 65 countries, [Global Education programs](#) allow students to tailor their educational experience to their unique interests and skill sets. Those in applied biological sciences are able to expand their knowledge of how science impacts society in a variety of cultures, and they can acquire a global perspective, preparing them to lead in a future-focused career. Students earn ASU credit for completed courses while staying on track for graduation, and they may apply financial aid and scholarships toward program costs.

Career opportunities

Graduates may pursue entry-level careers in wildlife and restoration ecology, urban horticulture and secondary education. The general program in applied biological sciences prepares graduates to succeed in graduate and professional schools in disciplines such as:

- biological research
- dentistry
- environmental biotechnology
- human health
- medicine
- physical therapy
- secondary education

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
<u>Biological Scientist (General)</u>	3.9%	\$87,300
<u>Biomedical Engineer</u> ☀	5.1%	\$99,550
<u>Dentist</u>	4.4%	\$155,040
<u>Family Practice Medical Doctor (FP MD)</u>	3.7%	\$211,300
<u>Health Sciences Manager</u> ☀	4.8%	\$144,440
<u>Life Scientist</u> ☀	5.2%	\$83,930
<u>Medical Scientist</u> ☀	9.8%	\$99,930
<u>Microbiologist</u> ☀	5.2%	\$81,990
<u>Molecular Biologist</u>	3.9%	\$87,300

* 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 Applied Sciences and Arts | SANCA 233

CISA@asu.edu | 480-727-1526