

Applied Biological Sciences (Secondary Education in Biology), BS

TSABSSBS

Do you have a passion for teaching and an interest in building a strong foundation in applied biology? This program offers a blend of classroom instruction and professional experiences, which prepare you to ask the right questions, navigate uncertainty and make a difference.

Program description

The secondary education in biology concentration in the BS program in applied biological sciences is designed for students who want to teach biology at the middle school and high school levels.

In addition to the standard curriculum, students receive hands-on experience in laboratory instruction. The goal of the program is to prepare students to become teachers who excel in biology and related sciences.


Students in this program contextualize knowledge through experience-based learning activities, including:

- case studies
- faculty-guided research
- service-learning projects
- secondary education clinical experience

Students enrolling in this concentration should also contact the Mary Lou Fulton Teachers College for information on teacher preparation coursework.

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





Those who wish to pursue a future in education must understand how classrooms are shaped by students' diverse experiences, backgrounds and cultures. [Global Education programs](#) offer firsthand experience in a wide range of cultures and communities, which can enhance a degree program. Students earn ASU credit for completed courses while staying on track for graduation, and they may apply financial aid and scholarships toward program costs. Programs can be found in a variety of countries around the world.

Career opportunities

Graduates of this concentration program are prepared to teach biology in high schools or pursue numerous entry-level careers in biology. Employment opportunities exist in private and public sectors. Graduates of the general program in applied biological sciences are also prepared to succeed in graduate or professional schools in disciplines such as:

- animal health
- dentistry
- medicine
- nonprofit education
- physical therapy
- teaching

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>Agricultural Technician</u> 	4.5%	\$41,760
<u>Biological Technician</u> 	4.7%	\$49,650
<u>Fundraising Consultant</u> 	5.2%	\$61,190
<u>High School Teacher</u>	1.0%	\$62,360
<u>Middle School Teacher</u>	0.8%	\$61,810
<u>Museum Exhibit Designer</u> 	9.9%	\$47,270

* 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](#)

Professional licensure

ASU programs that may lead to professional licensure or certification are intended to prepare students for potential licensure or certification in Arizona. Completion of an ASU program may not meet educational requirements for licensure or certification in another state. For more information, students should visit the [ASU professional licensure](#) webpage.

Contact information

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