# Biological Sciences, BS

**LABSCBS** 

Are you captivated by the variety and wonder of life? Are you curious about how organisms grow, interact and affect each other? Build a strong foundation of knowledge, critical thinking skills and key lab techniques that will launch your career in science, health care and research.

#### **Program description**

In the BS program in biological sciences, students discover the basic organization and processes of life, from molecules to ecosystems. They investigate how hereditary information is transferred, how organisms evolve and the interplay of organisms and their environment.

Students can opt for the Bachelor of Science in biological sciences with no concentration, or they can choose one of five:

- biology and society
- biomedical sciences
- conservation biology and ecology
- genetics, cell and developmental biology
- neurobiology, physiology and behavior

The general degree allows students to take core courses in multiple disciplines and have flexibility to focus their study on their areas of interest.

This program is available as an <u>accelerated degree program</u>.

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 <u>The College's website</u> for more information and requirements.

# At a glance

• College/School: The College of Liberal Arts and Sciences

• Location: Tempe or Online, ASU Local

• 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 (on-campus) 2024 - 2025 Major Map (online) 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:

Biology (Biology and Society), MS

Biology, MS

Computational Life Sciences, MS

Global Management (Creative Industries and Design Thinking), MGM

Global Management (Digital Audience Strategy), MGM

Global Management (Global Affairs), MGM

Global Management (Global Business), MGM

Global Management (Global Development and Innovation), MGM

Global Management (Global Digital Transformation), MGM

Global Management (Global Entrepreneurship), MGM

Global Management (Global Health Care Delivery), MGM

Global Management (Global Legal Studies), MGM

Global Management (Nonprofit Leadership and Management), MGM

Global Management (Public Administration), MGM

Global Management (Public Policy), MGM

Global Management (Sustainability Solutions), MGM

Global Management (Sustainable Tourism), MGM

Global Management, MGM

Microbiology, MS

Molecular and Cellular Biology, 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.

<u>First-year</u> | <u>Transfer</u> | <u>International</u> | <u>Readmission</u>

#### **Tuition information**

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> 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 <u>Change of Major form</u> for information about how to change a major to this program.

#### **Attend online**

#### **ASU Online**

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may <u>view the program's ASU Online page</u> for program descriptions and to request more information.

#### **ASU Local**

It is now possible to earn an ASU degree with <u>ASU Local</u>, an integrated college experience in which students take advantage of in-person success coaching and programming experiences on site while

completing one of 130+ undergraduate online degree programs, all of which come with online faculty interaction and tutoring support.

# **Transfer options**

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use <a href="MyPath2ASU®">MyPath2ASU®</a> to outline a list of recommended courses to take prior to transfer.

ASU has <u>transfer partnerships</u> 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.

# **Program learning outcomes**

Program learning outcomes identify what a student will learn or be able to do upon completion of their program. This program has the following program outcomes:

- Demonstrate capacity for scientific thinking by applying relevant background knowledge to analyze and/or develop scientific explanations.
- Effectively communicate complex scientific concepts, ideas, and reasoning with appropriate use of relevant sources and evidence.
- Demonstrate preparedness for graduate/professional degree programs and/or employment.

### Global opportunities

#### Global experience

Professional health education is competitive. Less than 50% of students who apply to medical schools are admitted; the numbers vary for other health-related fields. Medical and professional school admission officers increasingly focus on students with dedication to community service, so engaging in community activities and research abroad will help any student who intends to pursue a health career to create a diverse, accomplished portfolio that can give them an advantage over the competition.

Study abroad students experience distinct biological environments and gain an understanding of worldwide differences in the human condition. <u>Global Education programs</u> provide an opportunity for students to develop a valuable skill set by exposing them to different health environments and expanding their knowledge of culturally specific health approaches.

The College of Liberal Arts and Sciences recommends these programs for students majoring in biological sciences.

# **Career opportunities**

The biological science major provides an excellent foundation for advanced research and graduate study in biological sciences, health sciences, law and other graduate-level and professional programs, including dentistry, medicine, pharmacy and veterinary medicine.

The Bachelor of Science degree program also prepares graduates with the strong foundation they need for direct entry into their choice of career in many field options, including biotechnology, education, government and industry.

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
Biological Sciences Professor 🌼	8.6%	\$81,650
<u>Biologist</u>	3.9%	\$87,300
Clinical Trial Manager 🌼	4.8%	\$144,440
<u>Dentist</u>	4.4%	\$155,040
Environmental Protection Specialist .	6.1%	\$76,480
High School Teacher	1.0%	\$62,360
Medical and Health Services Manager 🧆	28.4%	\$104,830
<u>Pharmacist</u>	2.6%	\$132,750
Veterinarian (Vet) 🌣	19.7%	\$103,260

<sup>\*</sup> Data obtained from the Occupational Information Network (O\*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).



# **Contact information**

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