

Biochemistry, BS

LABCHBS

Explore the mysteries of life at the molecular and atomic level with hands-on lab experiences and problem-solving skills through a range of courses in the physical, quantitative and life sciences.


Program description

The BS program in biochemistry equips students with a solid foundation in basic chemistry, biomolecule properties and functions, and cellular mechanisms. The program encourages critical inquiry and problem-solving, preparing students to address complex biochemistry-related challenges.

Through laboratory work, students gain hands-on experience and hone experimental techniques and data analysis skills. Students are encouraged to engage with faculty research groups and labs, providing valuable exposure to ongoing scientific investigation.

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 [The College's website](#) 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 270 - Calculus w/Analytic Geometry I or MAT 265 Calculus for Engineers I
- **Math intensity:** Substantial 

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:

[Biochemistry \(Medicinal Chemistry\), MS](#)

[Computational Life Sciences, MS](#)

[Global Management, MGM](#)

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.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

ASU Local

It is now possible to earn an ASU degree with [ASU Local](#), 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 [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

Students who participate in [Global Education programs](#) gain valuable experience in a diverse set of programs in other countries. The study abroad experience helps students deepen their understanding of biochemical processes and enhance their knowledge of research methods used across the globe. With their resumes enhanced by the heightened skills in communication, critical thinking and leadership they acquired through the study abroad experience, graduates stand out in their competitive fields.

Career opportunities

A Bachelor of Science degree in biochemistry is an excellent choice for careers in medicine and health, chemical and biotechnology industries, drug design and pharmaceuticals, new sources of energy and materials, research, government laboratories, environmental and food science, teaching and many other technical areas.

The program provides the necessary training for competitive applications to medical, dental, pharmacy and other health-related graduate schools, and to advanced graduate research degree programs in biochemistry.

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>Dentist</u>	4.4%	\$155,040
<u>High School Teacher</u>	1.0%	\$62,360
<u>Medical Doctor (MD)</u>	2.5%	\$214,460
<u>Medical Lab Technician</u> ☀	4.9%	\$57,380
<u>Medical Scientist</u> ☀	9.8%	\$99,930
<u>Optometrists</u> ☀	8.8%	\$125,590
<u>Pharmacist</u>	2.6%	\$132,750
<u>Physician Assistant (PA)</u> ☀	26.5%	\$126,010
<u>Scientist/Biochemist</u> ☀	6.7%	\$103,810
<u>Veterinarian (Vet)</u> ☀	19.7%	\$103,260

* 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 Molecular Sciences | PSD 104

SMSadvising@asu.edu | 480-965-7667