Biochemistry, **BA**

LABCHBA

Discover the secret chemical processes of living organisms at the molecular and atomic levels. Through courses in the physical sciences, life sciences and liberal arts, you build life and problem-solving skills that prepare you for a wide range of careers.

Program description

The BA program in biochemistry imparts a foundational understanding of basic chemistry, biomolecular chemistry, cellular function, and liberal arts and languages. The program encourages students to explore biochemistry-related questions and challenges, honing their analytical thinking and problem-solving skills. By integrating liberal arts and language courses with physical sciences, students develop a holistic perspective.

The curriculum encompasses traditional coursework, featuring lectures and laboratory sessions that equip students with both theoretical knowledge and practical laboratory skills. Students are encouraged to join faculty research groups, enabling hands-on participation in ongoing scientific investigations. Flexibility in the program structure accommodates individual goals, including the pursuit of dual degrees or specific interests.

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: <u>The College of Liberal Arts and Sciences</u>
- Location: <u>Tempe</u> or <u>Online</u>, <u>ASU Local</u>
- Second language requirement: Yes

- First required math course: MAT 251 Calculus for Life Sciences Students may complete MAT 270 Calculus with Analytic Geometry I or MAT 265 Calculus for Engineers I in lieu of 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:

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 <u>how to apply</u>.

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 <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 <u>MyPath2ASU®</u> 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.

Global opportunities

Global experience

When <u>studying abroad</u>, students gain valuable experience in a diverse set of programs. Students earn ASU credit for completed courses, while staying on track for graduation.

With their resumes enhanced by the heightened skills in communication, critical thinking and leadership they acquired through the study abroad experiences, graduates stand out competitively in their chosen fields.

Career opportunities

Graduates of this program are prepared for careers in a variety of fields, such as medicine and health, chemical and biotechnology industry, pharmaceuticals, environmental and food science, food production,

environmental protection, scientific sales and marketing, and other forms of public service such as policymaking and teaching, patent law and many other technical areas.

Those with a Bachelor of Arts in biochemistry also are well prepared for application to graduate schools, such as medical, dental and pharmacy.

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
Chemical Technician	3.2%	\$50,840
Dentist	4.4%	\$155,040
High School Teacher	1.0%	\$62,360
<u>Medical Doctor (MD)</u>	2.5%	\$214,460
Medical Scientist 🤗	9.8%	\$99,930
Pharmacist	2.6%	\$132,750
Physician Assistant (PA) 🤷	26.5%	\$126,010
<u>Scientist/Biochemist</u>	6.7%	\$103,810
<u>Technical Writer 🤤</u>	6.9%	\$79,960
<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

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