Biochemistry, BS

Interested in learning about life from a molecular perspective? You will complete a range of physical and life sciences courses that prepare you to enter numerous scientific careers including health and medicine with your strong training in critical thinking and interdisciplinary, scientific problem-solving.

Program Description

The BS program in biochemistry provides students with a course of study in the chemical processes of living organisms. Among the endeavors that depend upon a thorough grounding in the area are discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations, the production of new materials and solutions to problems such as food production and environmental remediation.

This program is appropriate preparation for further study of biochemistry or related sciences in graduate school as well as for medical, dental or pharmacy school.

At a Glance

- **College/School:** College of Liberal Arts and Sciences
- **Location:** Tempe campus or online
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 270 - Calculus w/Analytic Geometry I
- **Math Intensity:** Substantial

Required Courses (Major Map)
Accelerated Degrees

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 and master's degree** with:

- Biochemistry (Medicinal Chemistry), MS
- Nanoscience, PSM

Acceptance to the graduate program requires a separate application. During their junior year, eligible students will be advised by their academic departments to apply.

Admission Requirements

**General University Admission Requirements:**

All students are required to meet general university admission requirements.

- Freshman
- Transfer
- International
- Readmission

Change of Major Requirements

A current ASU student has no additional requirements for changing majors. Students should refer to [https://students.asu.edu/changingmajors](https://students.asu.edu/changingmajors) for information about how to change a major to this program.

Attend Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may view the program description and request more information [here](https://students.asu.edu/changingmajors).

Transfer Agreements

ASU has partnered with colleges and universities in Arizona, California, Illinois and Washington to provide transfer curriculum pathways. Students should select their current institution to see if there is a partnership agreement between the institution and ASU for this degree program. Students who do not see their state or institution listed should check back as ASU is always working on creating new partnerships.
Transfer from a Maricopa Community College in Arizona

Select a college

- Chandler-Gilbert Community College
- Estrella Mountain Community College
- GateWay Community College
- Glendale Community College
- Mesa Community College
- Paradise Valley Community College
- Phoenix College
- Rio Salado College
- Scottsdale Community College
- South Mountain Community College

Transfer from an Arizona Community College

Select a college

- Arizona Western College
- Central Arizona College
- Cochise College
- Coconino Community College
- Dine College
- Eastern Arizona College
- Gila Community College
- Mohave Community College
- Northland Pioneer College
- Pima Community College
- Tohono O'odham Community College
- Yavapai College

Transfer from another state

Select a state

- California
- Illinois
- Washington
- Another state

Global Opportunities

Global Experience

With over 250 programs in more than 65 countries (ranging from one week to one year), study abroad is possible for all ASU students wishing to gain global skills and knowledge in preparation for a 21st century career. Students earn ASU credit for completed courses, while staying on track for graduation, and may apply financial aid and scholarships toward program costs. [https://mystudyabroad.asu.edu/](https://mystudyabroad.asu.edu/)
Career Opportunities

A solid undergraduate education in biochemistry provides the necessary background for career paths in chemical industries, government, health care, research, teaching and other areas.

Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often study biochemistry with supporting work in biology and chemistry as the route for preprofessional training.

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence Analyst</td>
<td>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td>Clinical Data Manager</td>
<td>33.8%</td>
<td>$84,060</td>
</tr>
<tr>
<td>College/University Professor</td>
<td>9.4%</td>
<td>$64,480</td>
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<tr>
<td>Compliance Manager</td>
<td>8.0%</td>
<td>$105,610</td>
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<tr>
<td>Dentist</td>
<td>19.4%</td>
<td>$151,440</td>
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<tr>
<td>Epidemiologist</td>
<td>8.8%</td>
<td>$69,660</td>
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<tr>
<td>Fish and Game Warden</td>
<td>4.3%</td>
<td>$56,410</td>
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<tr>
<td>Forester</td>
<td>5.0%</td>
<td>$60,120</td>
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<tr>
<td>Geologist</td>
<td>14.0%</td>
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<tr>
<td>Health Sciences Manager</td>
<td>9.9%</td>
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<tr>
<td>High School Teacher</td>
<td>7.5%</td>
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<tr>
<td>Hydrogeologist</td>
<td>9.9%</td>
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<tr>
<td>Lawyer</td>
<td>8.2%</td>
<td>$119,250</td>
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<tr>
<td>Marketing Manager</td>
<td>10.1%</td>
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<tr>
<td>Materials Scientist</td>
<td>7.1%</td>
<td>$99,530</td>
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<tr>
<td>Medical Doctor (MD)</td>
<td>14.6%</td>
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<tr>
<td>Medical Lab Technician</td>
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<tr>
<td>Medical Scientist</td>
<td>13.4%</td>
<td>$82,090</td>
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<tr>
<td>Optometrists</td>
<td>17.9%</td>
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<tr>
<td>Pharmacist</td>
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<tr>
<td>Physical Therapist (PT)</td>
<td>28.0%</td>
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<tr>
<td>Physician Assistant (PA)</td>
<td>37.3%</td>
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<td>Occupation</td>
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<td>Salary</td>
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<tr>
<td>----------------------------------------</td>
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<tr>
<td>Soil Scientist</td>
<td>8.8%</td>
<td>$62,430</td>
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<tr>
<td>Technical Writer</td>
<td>11.0%</td>
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<tr>
<td>Veterinarian (Vet)</td>
<td>18.8%</td>
<td>$90,420</td>
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<tr>
<td>Wind Energy Project Manager</td>
<td>8.0%</td>
<td>$105,610</td>
</tr>
</tbody>
</table>

* 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  🌿 Green Occupation

## Contact Information

Schedule an advisor appointment  
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