Chemistry, BS

Chemists do more than just laboratory-based research. A chemistry degree teaches you to solve problems at the molecular level in areas such as environmental science, medicine, materials and energy. You will learn to think critically and interdisciplinarily, and you will be prepared for numerous scientific careers or graduate school.

Program Description

Chemistry is concerned with the composition, properties and reactions of matter. The BS program in chemistry provides students the knowledge and skills necessary to address contemporary scientific challenges in transdisciplinary areas such as energy and sustainability, medicine and health, materials and nanoscience, geologic and biospheric science, frontiers of chemical measurement and fundamental molecular science.

Students complete coursework in the foundational chemistry disciplines of analytical, inorganic, organic and physical chemistry as well as biochemistry as part of a curriculum approved by the American Chemical Society. This degree is appropriate for further study of chemistry or other physical sciences in graduate school or for scientific careers.

At a Glance

- **College/School:** College of Liberal Arts and Sciences
- **Location:** Tempe campus
- **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)

2018 - 2019 Major Map
Major Map (Archives)

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 for information about how to change a major to this program.

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 program of education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage
and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology 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>Chemical Equipment Operator</td>
<td></td>
<td>$47,800</td>
</tr>
<tr>
<td>Chemical Plant and System Operator</td>
<td></td>
<td>$62,170</td>
</tr>
<tr>
<td>Chemical Technician</td>
<td>4.0%</td>
<td>$47,280</td>
</tr>
<tr>
<td>Chemist</td>
<td>6.5%</td>
<td>$74,740</td>
</tr>
<tr>
<td>Climate Change Analyst</td>
<td>11.1%</td>
<td>$69,400</td>
</tr>
<tr>
<td>Clinical Trial Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>College/University Professor</td>
<td>9.4%</td>
<td>$64,480</td>
</tr>
<tr>
<td>Compliance Manager</td>
<td>8.0%</td>
<td>$105,610</td>
</tr>
<tr>
<td>Crime Scene Investigator</td>
<td>16.8%</td>
<td>$57,850</td>
</tr>
<tr>
<td>Education Professor</td>
<td>10.3%</td>
<td>$64,020</td>
</tr>
<tr>
<td>Energy Engineer</td>
<td>6.4%</td>
<td>$97,250</td>
</tr>
<tr>
<td>Geospatial Intelligence Analyst</td>
<td>7.2%</td>
<td>$103,990</td>
</tr>
<tr>
<td>Health Sciences Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>7.5%</td>
<td>$59,170</td>
</tr>
<tr>
<td>Hydrogeologist</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>Lawyer</td>
<td>8.2%</td>
<td>$119,250</td>
</tr>
<tr>
<td>Marketing Manager</td>
<td>10.1%</td>
<td>$132,230</td>
</tr>
<tr>
<td>Materials Scientist</td>
<td>7.1%</td>
<td>$99,530</td>
</tr>
<tr>
<td>Meteorologist</td>
<td>12.0%</td>
<td>$92,070</td>
</tr>
<tr>
<td>Middle School Teacher</td>
<td>7.5%</td>
<td>$57,720</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>5.6%</td>
<td>$124,170</td>
</tr>
<tr>
<td>Soil Scientist</td>
<td>8.8%</td>
<td>$62,430</td>
</tr>
<tr>
<td>Surgeon (General)</td>
<td>11.4%</td>
<td>#</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).
Contact Information

Schedule an advisor appointment
School of Molecular Sciences | PSD 106
SMSadvising@asu.edu | 480-965-7667