Chemistry, BS

LACHMBS

Explore the world of chemistry and craft a better future. Dive into hands-on laboratories and unleash your passion to tackle contemporary challenges in materials, medicine, energy, technology and beyond.

Program description

Students in the BS program in chemistry acquire the profound understanding and practical skills needed to address complex scientific challenges at the atomic and molecular levels. The expertise they gain spans diverse fields, including energy, sustainability, technology materials, medicine, nanoscience, environmental science, forensics, cosmetics and food chemistry. Graduates emerge well prepared for advanced studies in chemistry and material science, positioning them competitively for graduate degree programs.

The curriculum encompasses a rigorous set of courses, integrating lectures and laboratory sessions. This approach equips students with a deep understanding of atomic and molecular principles and hones their problem-solving abilities. The program encourages critical inquiry, fostering the development of scientific thinking and analytical skills.

Students are strongly encouraged to join laboratory research groups, providing hands-on experience in scientific investigation and the opportunity to delve into advanced research. Given the nature of faculty research in the School of Molecular Sciences, Bachelor of Science in chemistry students generally have the widest selection of faculty to choose from and hence the greatest number of possible research opportunities.

Accreditation by the American Chemical Society (<u>https://www.acs.org</u>) underscores the program's quality and aligns students with industry standards. With a solid foundation in chemistry, hands-on laboratory experience and critical thinking skills, students are poised to make significant contributions to scientific advancement and address complex problems in their chosen disciplines.

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: <u>Tempe</u>
- Second language requirement: No
- First required math course: MAT 270 Calculus w/Analytic Geometry I or MAT 265 Calculus for Engineers
- Math intensity: Substantial

Required courses (Major Map)

2024 - 2025 Major Map 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

Materials Science and Engineering, 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 <u>how to apply</u>.

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.

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>, chemistry students can gain valuable experience in a diverse set of programs, and they acquire heightened skills in communication, critical thinking and leadership, which will enable them to stand out competitively in their chosen field. Students earn ASU credit for completed courses while staying on track for graduation.

Career opportunities

A degree in chemistry provides the background for careers in chemical and electronics industries, in national research labs, environmental labs and forensic labs. Chemistry can be combined with law for patent work, with economics for sales and marketing careers, and with computer science for careers in information technology. Students often take Bachelor of Science in chemistry degree programs to become competitive applicants for admission to medical, dental or pharmacy schools.

Chemists conduct both research and routine work in laboratories; they study the environment; they work in manufacturing, sales and marketing; they work in the public sector deciding policy and regulation; and they teach.

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
Chemist 🧶	6.2%	\$80,670
Chemistry Professor	3.5%	\$80,720
<u>Climate Change Analyst</u>	6.1%	\$76,480
<u>Crime Scene Investigator 🍳</u>	12.6%	\$63,740
High School Teacher	1.0%	\$62,360
Hydrogeologist 🤷	4.8%	\$144,440
<u>Materials Scientist</u> 🔍	5.1%	\$104,380
Pharmacist	2.6%	\$132,750

* 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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