

Biochemistry, MS

LABIOCHMS

To become successful in an increasingly post-disciplinary scientific world, you'll want to learn how to solve biological problems with molecular tools. This program, with its distinct emphasis on structure, properties and synthesis from the molecular perspective in a biological context, allows you to tackle complex challenges in and out of the lab.

Program description

Degree awarded: MS Biochemistry

Students who earn an MS degree in biochemistry in the School of Molecular Sciences are trained in the fundamental aspects of the discipline, but most also choose to learn by joining transdisciplinary teams that work on larger, mission-based contemporary problems in areas such as:

- biogeochemistry
- energy and sustainability
- fundamental chemical biology
- materials and nanoscience
- medicine and health
- structure function and dynamics

The master's degree program in biochemistry provides students with the training they need to solve biological problems at the molecular scale and contribute to research on current challenging societal issues.

At a glance

- **College/School:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe](#)

Degree requirements

30 credit hours and a thesis, or

30 credit hours including the required capstone course (BCH 597)

Required Core (4 credit hours)

BCH 501 Current Topics in Biochemistry or CHM 501 Current Topics in Chemistry (4)

Electives (12 or 18 credit hours)

Other Requirements (5 or 8 credit hours)

BCH 501 Current Topics in Biochemistry or CHM 501 Current Topics in Chemistry (2)

BCH 591 Seminar (3)

BCH 592 Research (8)

Culminating Experience (3 or 6 credits)

BCH 597 Capstone (3)

BCH 599 Thesis (6)

Additional Curriculum Information

For the required core, students complete four credit hours of any combination of BCH 501 or CHM 501. Students will choose one of the culminating experience options listed above. The credit hours required for the electives and other requirements depend on the culminating experience chosen, as all students must complete 30 credit hours for this degree program. Students who choose the thesis option complete 12 credit hours of electives as well as BCH 592 for eight credit hours. Students who choose the capstone option complete 18 credit hours of electives as well as two additional credit hours of CHM 501 or BCH 501 and three credit hours of BCH 591.

The program consists of coursework and seminars as well as a research component (extensiveness dependent upon culminating experience).

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in chemistry, biochemistry or a closely related field from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. personal statement
4. three letters of recommendation
5. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide [proof of English proficiency](#) regardless of their current residency.

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.

Application deadlines

Fall

Spring

[expand](#)

[expand](#)

Career opportunities

Professionals with training achieved in pursuit of a graduate degree in biochemistry have opportunities in five general areas: industry (research and development, quality control), academia (high school and higher education), government (research, policy), nonprofit (policy, public education), and entrepreneurship (consulting, startups). In addition to specialized technical skills, graduates possess many high-demand skills, like critical thinking, teamwork and collaboration, and time management.

Some career examples include:

- chemistry lecturer
- drug discovery scientist
- government scientist
- high school teacher
- pharmacology scientist
- research and development scientist
- science consultant

The American Chemical Society also provides helpful resources and a more exhaustive list of possible careers on their website at <https://www.acs.org/careers/chemical-sciences.html>.

Contact information

