

Biochemistry (Medicinal Chemistry), MS

LABCHMCMS

Learn to solve medicinal problems with molecular tools. Become successful in an increasingly post-disciplinary scientific world with this program's distinct emphasis on structure, properties and synthesis from the molecular perspective in a biological context, allowing you to tackle complex challenges in and out of the lab.

Program description

Degree awarded: MS Biochemistry (Medicinal Biochemistry)

Students earning an MS in biochemistry with a concentration in medicinal chemistry from the School of Molecular Sciences are trained in the fundamental aspects of the discipline while joining transdisciplinary teams that work on larger, mission-based contemporary problems in areas such as:

- fundamental chemical biology
- medicine and health
- structure function and dynamics

At a glance

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

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, BS](#)

[Biochemistry \(Medicinal Chemistry\), BS](#)

Chemistry, BS

Molecular Biosciences and Biotechnology, BS

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 [how to apply](#).

Degree requirements

30 credit hours including the required applied project (research paper) course (CHM 593 or BCH 593)

Required Core (4 credit hours)

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

Concentration (3 credit hours)

CHM 535 Medicinal Chemistry (3)

Electives (15 credit hours)

three 500-level courses (9)

additional coursework or BCH 592 Research (6)

Other Requirements (6 credit hours)

BCH 592 Research (6)

Culminating Experience (2 credit hours)

CHM 593 Applied Project or BCH 593 Applied Project (2)

Additional Curriculum Information

The program consists of coursework and seminars as well as a research component. Elective coursework is selected based on the research area and in consultation of the research advisor.

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.

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.

Applicants interested in pursuing the accelerated degree program should review the requirements and submit a pre-application found on the [School of Molecular Sciences website](#) prior to submitting a formal graduate admission application to the degree program.

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 chemistry or 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 vital, high-demand skills, such as critical thinking, teamwork and collaboration, and time management.

Some career examples include:

- chemistry lecturer
- drug discovery scientist
- high school teacher
- medical lab technician
- pharmacology scientist
- research and development scientist

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

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