Biochemistry (Medicinal Chemistry), MS

Set yourself up for sustained success in medical school, pharmacy school or other higher education in the health care professions by taking advanced graduate coursework, gaining research experience and earning both your BS and MS degrees in five years.

Program Description

Degree Awarded: MS Biochemistry (Medicinal Biochemistry)
The faculty in the School of Molecular Sciences offer a program leading to the MS in biochemistry with a concentration in medicinal chemistry. This program is intended for students who plan to continue their educational training in pharmacy or medical school or in a related field and want to expand their background knowledge in biochemistry before beginning their professional education.

At a Glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe campus or Online

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 and 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. During their junior year, eligible students are advised by their academic departments to apply.

**Degree Requirements**

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

A minimum of 30 credit hours are required, including coursework, seminars, research and an applied project consisting of a written research paper. Courses are selected by students in consultation with their supervisory committee based on the research area.

The Master of Science in biochemistry is awarded when the student has obtained a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in coursework, demonstrated quality performance in the laboratory and completion of the research project, completed and presented an approved research paper at an oral defense to the student's supervisory committee, and met all deadline dates and requirements set by the Graduate College.

A program fee in the amount of $300 per semester is required in addition to the normal tuition.

**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 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 Services application to the degree program.

**Application Deadlines**

**Fall**

**Spring**

**Career Opportunities**

Professionals with training achieved in pursuit of a graduate degree in chemistry or biochemistry have opportunities in five general areas: industry (R&D, quality control), academia (high school and higher education), government (research, policy), non-profit (policy, public education), and entrepreneurship (consulting, start-ups). In addition to specialized technical skills, graduates possess high-demand skills like critical thinking, teamwork and collaboration, time management and many other vital skills.

Some career examples include:

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

The American Chemical Society also provides helpful resources and a more exhaustive list of possible careers on their website at [https://www.acs.org/content/acs/en/careers/chemical-sciences.html](https://www.acs.org/content/acs/en/careers/chemical-sciences.html).

**Contact Information**

[School of Molecular Sciences](https://www.asu.edu) | PSD 102
smsgrad@asu.edu | 480-965-4664