Chemistry, MS

LACHEMMS

Chemistry contributes to solving a broad range of scientific problems in fields like energy, disease diagnosis and treatment, and materials design and production. You can develop skills that enable you to tackle complex challenges and create new scientific knowledge.

Program description

Degree awarded: MS Chemistry

Students earning an MS degree in chemistry in the School of Molecular Sciences are trained in the foundation disciplines of analytical, organic, physical, inorganic and environmental chemistry and geochemistry. Most also choose to learn by joining transdisciplinary research teams that work on larger, mission-based contemporary problems in areas such as:

- energy and sustainability
- frontiers of chemical measurement
- fundamental molecular science
- geologic and biospheric science
- materials and nanoscience
- medicine and health
- structure function and dynamics

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

At a glance

• College/School: The College of Liberal Arts and Sciences

• Location: <u>Tempe</u>

Degree requirements

30 credit hours and a thesis, or

30 credit hours including the required capstone course (CHM 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)

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

CHM 591 Seminar (3)

CHM 592 Research (8)

Culminating Experience (3 or 6 credit hours)

CHM 597 Capstone (3)

CHM 599 Thesis (6)

Additional Curriculum Information

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 CHM 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 CHM 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.

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 <u>ASU tuition and financial aid</u> 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 many high-demand skills, like critical thinking, teamwork and collaboration, and time management.

Some career examples include:

- chemical technician
- chemistry lecturer
- environmental science specialist
- government scientist
- high school teacher
- materials scientist
- military scientist
- science consultant

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

Contact information

School of Molecular Sciences | PSD 104 smsgrad@asu.edu | 480-965-4664