Molecular and Cellular Biology, MS

Program Description

Degree Awarded: MS Molecular and Cellular Biology
The MS program in molecular and cellular biology focuses on the fundamental molecular events at the core of all life. It encourages interdisciplinary, innovative, world-class research, allowing students to choose from a diverse range of research and training opportunities that extend beyond the traditional boundaries of biological research. Students are able to tailor the program around their interests and gain skills in contemporary approaches used in molecular and cellular biology.

At a Glance

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

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:

- Biological Sciences, BS
- Biological Sciences (Biology and Society), BS
- Biological Sciences (Biomedical Sciences), BS
- Biological Sciences (Conservation Biology and Ecology), BS
- Biological Sciences (Genetics, Cell and Developmental Biology), BS
- Biological Sciences (Neurobiology, Physiology and Behavior), BS
- Microbiology, BS
Molecular Biosciences and Biotechnology, BS
Neuroscience, 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 and a thesis

Required Core (6 credit hours)
MCB 555 Advanced Molecular and Cellular Sciences (3)
MCB 556 Advanced Molecular and Cellular Biology II (3)

Electives or Research (10 credit hours)

Other Requirements (8 credit hours)
MCB 501 Seminar: Molecular and Cellular Biology Colloquium (4)
BIO 543 Molecular Genetics and Genomics (3)
BIO 610 Introduction to Responsible Conduct of Research in Life Sciences (1)

Culminating Experience (6 credit hours)
MCB 599 Thesis (6)

Additional Curriculum Information
Students are required to take MCB 501 each semester they are registered. If a student is registered for more or fewer than four semesters, the research hours and MCB 501 hours may be adjusted accordingly to reach 30 credit hours.

Students should see the academic unit for a complete list of approved electives.

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 the biological sciences, 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 applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

Applicants must submit the following:
1. graduate admission application and application fee
2. official transcripts
3. academic record form
4. personal statement
5. curriculum vitae or resume
6. three letters of recommendation
7. 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.

Research experience is a desired qualification.

Career Opportunities
A master's degree in molecular and cellular biology provides strong preparation for academic careers from community colleges to research universities. The skills and knowledge obtained in this program are also valuable for government careers in federal and state agencies and for careers in industry and nongovernmental organizations.

Career examples include:

- food, agriculture and health care scientists in academic, private and industrial labs
- instructors at community colleges
- researchers and technicians in government labs and non-profit organizations
- science teachers in elementary and high schools

Contact Information
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