

Biology MS

COLLEGE OF SCIENCE AND TECHNOLOGY

Learn more about the Master of Science in Biology.

About the Program

The MS in Biology offers students rigorous advanced study of the Biological Sciences. Broad preparation is offered in major research areas in Biology through a variety of formal courses and advanced seminars. Students are encouraged to take courses in related sciences. Preparation for both research and teaching is important.

Time Limit for Degree Completion: 3 years

Campus Location: Main

Full-Time/Part-Time Status: Full-time study is required.

Interdisciplinary Study: The program encourages interdisciplinary research and coursework in Biochemistry, Chemistry, Computer Science, Environmental Science, Engineering, Mathematics and Physics. Special interdisciplinary programs in which faculty from the Biology Department participate include the Center for Biotechnology, Center for Computational Genetics and Genomics, the Institute for Computational Molecular Science, the Institute for Genomics and Evolutionary Medicine, and the Environmental Studies and Neuroscience Programs.

Areas of Specialization: Faculty members specialize in the areas of aquatic and terrestrial ecology, biochemistry, biophysics, cell biology, computational genomics, developmental biology, evolutionary and organismal biology, genetics, molecular biology, molecular evolution, neurobiology and virology.

Job Prospects: The department produces well-trained biologists who find work in the biotechnology, health professions and pharmaceutical fields, or in academia or government.

Non-Matriculated Student Policy: Non-matriculated students may enroll in a total of three courses (9 credits) with permission of the instructor and the department.

Financing Opportunities: University Fellowships, Graduate Assistantships, and Academic Internships are normally reserved for PhD students.

Admission Requirements and Deadlines

Application Deadline:

Fall: March 1

Spring: October 15; August 1 international

Matriculation in the Fall is recommended. Late applications may be considered for admission.

APPLY ONLINE to this graduate program.

Letters of Reference:

Number Required: 3

From Whom: Letters should be obtained from college/university faculty, preferably those in laboratory science areas, who are familiar with the applicant's academic and/or research abilities.

Coursework Required for Admission Consideration: Applicants should have a solid background in Biology and should have taken at least eight undergraduate Biology courses and one year each of Calculus, Chemistry and Physics. The Biology Department Graduate Committee may allow exceptions to these course requirements after review.

Bachelor's Degree in Discipline/Related Discipline: A baccalaureate degree in a science field is required.

Statement of Goals: In approximately 500 to 1,000 words, describe your interest in Temple's program, academic achievements and research goals, and provide the names of up to three faculty with whom you would like to conduct your master's research thesis.

Standardized Test Scores:

GRE: Not required. If submitted, a combined minimum score of 300 on the quantitative and verbal reasoning sections is expected.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 90
- IELTS Academic: 6.5
- PTE Academic: 61
- Duolingo: 110

Resume: Current resume required.

Transfer Credit: Graduate credits from an accredited institution may be transferred into the Biology program. The credits must be equivalent to coursework offered by the Biology Department at Temple University. A grade of "B" or better must have been earned for the credits to transfer. The Biology Department Graduate Committee makes recommendations to the Department Chair for transferring credit on an individual basis. The maximum number of credits a student may transfer is 6.

Program Requirements

General Program Requirements:

Number of Credits Required Beyond the Baccalaureate: 30

Required Courses:

| Code | Title | Credit Hours |
|---|-----------------------------------|--------------|
| Core Courses | | |
| BIOL 8003 | Introduction to Graduate Research | 3 |
| Two 8000-level Biology seminars ¹ | | 6 |
| Three 5000-level Biology electives | | 9 |
| Three didactic or research Biology courses ² | | 9 |
| Research Course | | |
| BIOL 9996 | Master's Thesis Research | 3 |
| Total Credit Hours | | 30 |

¹ One 3-credit 8000-level seminar may be replaced with three 1-credit 8000-level seminars. Also, one 5000-level course that emphasizes writing and communication may be substituted for one 3-credit 8000-level seminar. The 5000-level course need not be a Biology course, but approval from the student's advisor and the Graduate Chair is required.

² With approval from the student's advisor and the Graduate Chair, relevant courses from departments other than Biology may be taken.

Additional Requirements:

All graduate-level courses, including Biochemistry, must be passed with a "B-" or better.

Attendance at scheduled departmental colloquia is required.

Culminating Event:

Thesis:

The master's thesis is an original empirical study that demonstrates the student's knowledge of research methods and mastery of their primary area of interest. The thesis should be limited to a specific problem in the biological sciences and investigated under the direct supervision of a major advisor.

A student preparing to defend a master's thesis should confirm a date and time with their committee, composed of both the major advisor and another member of the Graduate Faculty. The student should then register with the department. After the date, time and room are approved, the Biology Department posts flyers announcing the defense.

The student's committee is responsible for evaluating the thesis and its oral defense in a public presentation. The committee votes to pass or fail the thesis and defense at the end of the public presentation. If revisions are required, the committee must approve the changes.

Contacts

Department Web Address:

<https://www.temple.edu/academics/degree-programs/biology-ms-st-biol-ms>

Department Information:

Dept. of Biology
255 Biology-Life Sciences Building
1900 N. 12th Street

Philadelphia, PA 19122-6078
grad.bio@temple.edu
215-204-8877

Submission Address for Application Materials:

<https://cst.temple.edu/academics/graduate-programs/apply-now>

Department Contacts:

Admissions:

Roum Lay
roum.lay@temple.edu
215-204-8854

Program Coordinator:

Tonia Hsieh, PhD
tonia.hsieh@temple.edu
215-204-0617

Graduate Chairperson:

Tonia Hsieh, PhD
tonia.hsieh@temple.edu
215-204-0617

Department Chairperson:

Erik Cordes
erik.cordes@temple.edu
215-204-8876