MASTER OF SCIENCE IN BIOLOGY (MS)

PROGRAM COORDINATORS

General Biology Track: Dr. Jianying Gu - jianying.gu@csi.cuny.edu
Biotechnology Track: Dr. Jimmie Fata - jimmie.fata@csi.cuny.edu

The Master of Science degree program in Biology is designed to provide research training and experience in the discipline of biology and allow students to specialize in such areas as molecular/cellular experimentation and evolution, ecology, and behavior. The program is an appropriate foundation for students whose current goal is a terminal master’s degree as a credential for laboratory or field research and for students who intend to continue to study toward a doctorate program.

The program prepares students for careers in the expanding fields of molecular biology, genetic engineering, conservation biology, and biotechnology. Graduates of the program will be prepared to conduct research, to evaluate the research of others, and to write and speak effectively in scientific fields. The program opens the door to careers in clinical and research laboratories, industry, teaching, science writing, and in governmental agencies in the fields of health, environment, and parks.

DEGREE REQUIREMENTS

The Master of Science program in Biology offers three tracks: General Biology, Biotechnology, and Biology-Education track.

General Biology Track

The Master of Science in Biology General Track requires 30 credits to complete the degree. All students are required to complete the following courses (9 Credits):

- Scientific Communication (3 Credits)
- Statistical Analysis (3 Credits)
- The Biosphere and Our Species (3 Credits)

Of the remaining 21 credits required for partial fulfillment of the Master of Science in Biology degree, students may choose from the following courses:

- Biology of Cancer
- Marine Ecology
- Biogeography
- Advanced Microscopy
- Cellular Toxicology
- Laboratory Methods in Molecular Genetics
- Principles and Methods of Systematic, Evolution and Phylogeny
- Molecular Genetics
- Introduction to Bioinformatics and Genomics
- Mathematical Models in Biology
- Principles of Epidemiology
- Thesis Research
- Independent Study
- Conservation Biology

Biotechnology Track

All students are required to complete the following courses (30 credits):

- Scientific Communications
- Introduction to Biotechnology
- Advanced Microscopy
- Molecular Biology and Biotechnology Laboratory
- Cellular Toxicology
- Molecular Genetics
- Thesis Research
- Independent Study

Note: There are no electives in the Biotechnology track.
**Biology – Education Track**

Students with initial certification in Adolescence Education (Biology) wishing to obtain professional certification in Biology will complete a program of 33 graduate credits. Students in the program enroll in The Biosphere and Our Species (3 Credits) and a Thesis Research course (6 Credits) with others in their cohort. In addition to these courses, they are required to take Advanced Studies in Teaching Secondary School Science (3 Credits). Students who choose this program of study will complete a thesis with guidance from faculty of the Departments of Biology and Education.

**ADMISSION REQUIREMENTS**

- BS in Biology degree from an accredited college (students with a baccalaureate in another discipline may be considered for admission)
- Overall GPA of 2.75 (B-) and a GPA of 3.0 (B) in undergraduate science and mathematics courses

*The Department of Biology Graduate Admissions Committee makes all decisions regarding admission to the program as a matriculated or non-matriculated student. Non-matriculated status: Applicants who meet most, but not all, of the admissions requirements may be considered for admission with non-matriculated status.*

**APPLICATION PROCEDURES**

**Graduate Application:**
The application must be completed online at [www.csi.cuny.edu/graduatetudies](http://www.csi.cuny.edu/graduatetudes).

**Transcripts:**
Applicants must request official transcripts from all post-secondary institutions attended. If you are currently enrolled in a post-secondary institution, have one transcript sent now and another sent when you complete the courses that you are taking. Applicants who have been enrolled at CSI do not need to request a CSI transcript; the Office of Recruitment and Admissions will obtain a copy.

**Application Fee:**
A $125.00 non-refundable application fee is required of all applicants. Please make your check or money order payable to the College of Staten Island.

**Letters of Recommendation:**
Two letters of recommendation testifying to the applicant's ability to complete successfully the program of graduate study are required.

**TOEFL or IELTS:**
The TOEFL or IELTS exam is a requirement of student for whom English is a second language.

*Test of English as a Foreign Language (TOEFL):* Minimum required score is 79 (Internet). For additional information or to register for the exam, please visit the TOEFL website at [www.ets.org](http://www.ets.org). Our institutional code is 2778.

*International English Language Testing System (IELTS):* We will only accept the academic exam scores. The minimum required score is 6.5 (overall band). For additional information or to register for the exam, please visit the IELTS website at [www.ielts.org](http://www.ielts.org).

*All documents must be submitted to the Office of Recruitment and Admissions.*

**Mailing Address:**
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