

# BACHELOR OF SCIENCE IN BIOLOGY

Faculty in the School of Biological Sciences believe that one learns science best by doing science. Many Biology courses feature authentic, student-driven research projects, and all Biology majors participate in research through undergraduate research courses. The School also offers many interdisciplinary courses, including bio-inspired design, bioethics, biophysics, mathematical models in biology, genomics and applied bioinformatics, signaling molecules, macromolecular modeling, aquatic chemical ecology, and experimental design and statistics. The Biology degree includes 21 hours of customizable technical electives and offers multiple options for students to tailor the degree for individual career goals, including the Research Option, Business Option, Pre-Health focus, Internships, Research, Teaching Assistant (TA) experience, Study Abroad & International Plan, Biology certificates and BS/MS options in Biology and Bioinformatics.

Biology graduates of Georgia Tech are expert, quantitative problem solvers ready to apply their skills in many different career paths. The undergraduate curriculum for the Bachelor of Science in Biology degree is designed to prepare students for employment in academia, government, or industry; for graduate studies in the biological sciences or science teaching; or for admission to medical, dental, or veterinary schools.

## Biology Undergraduate Programs

- Bachelor of Science in Biology - General
- Bachelor of Science in Biology - Business Option

## International Plan

Georgia Tech's International Plan, through the Office of International Education ([www.oie.gatech.edu/](http://www.oie.gatech.edu/)), involves two study abroad experiences and coursework in global studies. The plan offers a challenging and coherent academic program for students to develop global competence within the context of a Biology degree. The requirements include: language proficiency equivalent to two years of college coursework (twelve hours), one course in international relations (three hours), global economy (three hours), focused study of a region (three hours), an integrative course synthesizing the international experience (three hours), and two semesters (minimum of 26 weeks) in residence abroad. Georgia Tech biological sciences (BIOS) courses are taught in several Study Abroad programs such as the Pacific program, the BEST-Lyon program, and the Barcelona program. In addition, many biological sciences (BIOS)-equivalent courses are available through Georgia Tech partner universities abroad ([www.oie.gatech.edu/sa/programs/](http://www.oie.gatech.edu/sa/programs/)). Some of these universities teach biology courses in English, such as Hong Kong University, Tokyo Technological University, University of Victoria (New Zealand), National University of Singapore, University of Strathclyde (Scotland), and Bilkent University (Turkey). Successful completion of this plan earns students an international designation on their Georgia Tech degree.

## Research Option

This Research Option enables students to complete nine credit hours of supervised research with a Biology faculty member over multiple semesters. With faculty guidance, students write a brief proposal, perform independent, original research, and write a thesis about their work. The thesis is evaluated by two Biology Faculty members. The

first six credit hours of the research option are taken as BIOS 4699 (research for credit) or BIOS 4698 (research for pay). Students then take either BIOS 4690 in their final semester and two, one credit-hour writing courses, LMC 4701 and LMC 4702. These writing courses can be counted as Biology electives for Research Option students. Note that LMC 4701 should be taken in the semester prior to enrolling in BIOS 4690. The student's research is presented in BIOS 4460.

Code	Title	Credit Hours
Select one of the following research options:		
BIOS 4699	Undergraduate Research	6
BIOS 4698	Research Assistantship	
In the final semester of study, select the following courses:		
BIOS 4690	Independent Research Project	3
LMC 4701	Undergraduate Research Proposal Writing	2
& LMC 4702	and Undergraduate Research Thesis Writing <sup>1</sup>	
<b>Total Credit Hours</b>		<b>11</b>

<sup>1</sup> These writing courses can be counted as Biology electives for Research Option students. Note that LMC 4701 should be taken in the semester prior to enrolling in BIOS 4690.

Successful completion of this option earns students a "Research Option in Biology" designation on their Georgia Tech transcripts.

## BS/MS Programs

The School of Biological Sciences offers two BS/MS Options:

BS in Biology/MS in Biology

BS in Biology/MS in Bioinformatics