

## DEPARTMENT OF BIOLOGY

### Undergraduate Study

#### **Bachelor of Science in Biology (Course 7)**

The curriculum leading to the Bachelor of Science in Biology (<https://catalog.mit.edu/degree-charts/biology-course-7>) is designed to prepare students for a professional career in the area of the biological sciences. Graduates of this program are well prepared for positions in industrial or research institutes. However, experience has shown that many graduates choose to continue their education at a graduate school in order to obtain a PhD in an area such as biochemistry, microbiology, genetics, biophysics, cell biology, or physiology, followed by research or teaching in one of those areas. The undergraduate curriculum is also excellent preparation for students who wish to continue their education toward an MD, particularly if their career plans include laboratory investigations bearing on human disease. Students are encouraged to use their elective subjects for more advanced subjects in their field and for additional study in basic and advanced subjects offered in various departments.

#### **Bachelor of Science in Chemistry and Biology (Course 5-7)**

The Departments of Biology and Chemistry jointly offer a Bachelor of Science in Chemistry and Biology (<https://catalog.mit.edu/degree-charts/chemistry-biology-course-5-7>). A detailed description of the requirements for this degree program (<https://catalog.mit.edu/interdisciplinary/undergraduate-programs/degrees/chemistry-biology>) can be found in the section on Interdisciplinary Programs.

#### **Bachelor of Science in Computer Science and Molecular Biology (Course 6-7)**

The Department of Biology jointly offers a Bachelor of Science in Computer Science and Molecular Biology (<https://catalog.mit.edu/degree-charts/computer-science-molecular-biology-course-6-7>) with the Department of Electrical Engineering and Computer Science. Requirements for this degree program (<https://catalog.mit.edu/interdisciplinary/undergraduate-programs/degrees/computer-science-molecular-biology>) can be found in the section on Interdisciplinary Programs.

#### **Minor in Biology**

The department offers a Minor in Biology; the requirements are as follows:

5.12	Organic Chemistry I	12
7.03	Genetics	12
7.05	General Biochemistry	12
or 5.07[1]	Introduction to Biological Chemistry	
Select two of the following:		24-30

7.002 & 7.003[1]	Fundamentals of Experimental Molecular Biology and Applied Molecular Biology Laboratory	
7.06	Cell Biology	
7.08[1]	Fundamentals of Chemical Biology	
7.093 & 7.094	Modern Biostatistics and Modern Computational Biology	
7.20[1]	Human Physiology	
7.21	Microbial Physiology	
7.23[1]	Immunology	
7.26	Molecular Basis of Infectious Disease	
7.27	Principles of Human Disease and Aging	
7.28	Molecular Biology	
7.29[1]	Cellular and Molecular Neurobiology	
7.30[1]	Fundamentals of Ecology	
7.31	Current Topics in Mammalian Biology: Medical Implications	
7.32	Systems Biology	
7.33[1]	Evolutionary Biology: Concepts, Models and Computation	
7.37[1] or 7.371	Molecular and Engineering Aspects of Biotechnology Biological and Engineering Principles Underlying Novel Biotherapeutics	
7.45	The Hallmarks of Cancer	
7.46	Building with Cells	
7.49[1]	Developmental Neurobiology	
<b>Total Units</b>		<b>60-66</b>

For a general description of the minor program (<https://catalog.mit.edu/mit/undergraduate-education/academic-programs/minors>), see Undergraduate Education.

#### **Inquiries**

Additional information regarding undergraduate academic programs and research opportunities may be obtained from the Biology Education Office ([undergradbio@mit.edu](mailto:undergradbio@mit.edu)), Room 68-120, 617-253-4718.