

7.002 & 7.003	Fundamentals of Experimental Molecular Biology and Molecular Biology Laboratory (CI-M)	
20.109	Laboratory Fundamentals in Biological Engineering (CI-M)	
<i>Foundational Subjects</i>		
<i>Three Computer Science subjects:</i>		
6.006	Introduction to Algorithms	12
6.009	Fundamentals of Programming	12
6.046[J]	Design and Analysis of Algorithms	12
<i>Three Biological Science subjects:</i>		
7.03	Genetics	12
7.05	General Biochemistry ²	12
7.06	Cell Biology	12
Restricted Electives		
<i>Computational Biology</i>		
<i>Select one of the following:</i>		12
6.047	Computational Biology: Genomes, Networks, Evolution	
6.802[J]	Computational Systems Biology: Deep Learning in the Life Sciences	
7.09	Quantitative and Computational Biology ³	
7.33[J]	Evolutionary Biology: Concepts, Models and Computation ³	
<i>Biology</i>		
Select one subject from the list of Biology Restricted Electives		12
Advanced Undergraduate Project		
<i>Select one of the following:</i>		9-12
6.UAR	Seminar in Undergraduate Advanced Research (12 units, CI-M)	
6.UAT	Oral Communication (CI-M)	
7.19	Communication in Experimental Biology (CI-M)	
Units in Major		168-174
Unrestricted Electives		48
Units in Major That Also Satisfy the GIRs		(36)
Total Units Beyond the GIRs Required for SB Degree		180-186

The units for any subject that counts as one of the 17 GIR subjects cannot also be counted as units required beyond the GIRs.

¹ Students who enter MIT with sufficient programming experience may substitute 6.031 Elements of Software Construction (15 units) after taking 6.009.

² 5.07[J] Biological Chemistry I is also an acceptable option.

³ *These subjects can count towards either the Computational Biology or the Biology restricted electives, but not both.*

Biology Restricted Electives

7.08[J]	Biological Chemistry II	12
7.09	Quantitative and Computational Biology	12
7.20[J]	Human Physiology	12
7.21	Microbial Physiology	12
7.23[J]	Immunology	12
7.26	Molecular Basis of Infectious Disease	12
7.27	Principles of Human Disease	12
7.28	Molecular Biology	12
7.29[J]	Cellular and Molecular Neurobiology	12
7.30[J]	Fundamentals of Ecology	12
7.31	Current Topics in Mammalian Biology: Medical Implications	12
7.32	Systems Biology	12
7.33[J]	Evolutionary Biology: Concepts, Models and Computation ¹	12
7.37[J]	Molecular and Engineering Aspects of Biotechnology	12
7.371	Biological and Engineering Principles Underlying Novel Biotherapeutics	12
7.45	The Hallmarks of Cancer	12
7.46	Building with Cells	12
7.49[J]	Developmental Neurobiology	12

¹ *These subjects can count towards either the Computational Biology or the Biology restricted electives, but not both.*