To learn more about the offerings of the Department of Biology at MIT, please visit https://biology.mit.edu.

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The department of Biology conducts research in the following fields, and undergraduates are exposed to a broad range of these activities:

- Biochemistry and biophysics
- Bioengineering
- Cancer biology
- Cell biology
- Computational and systems biology
- Developmental biology
- Genetics
- Human genetics
- Immunology
- Microbiology
- Molecular medicine and human disease
- Neurobiology
- Plant molecular biology
- Structural biology

The undergraduate Biology program at MIT offers a robust course curriculum with an extensive lab research component, leading to a sophisticated understanding of the fundamental principles and current approaches in biology. This training provides excellent preparation for careers in such fields as:

- Academia/Research Institutions
- Medicine
- Biotechnology, biomedical and pharmaceutical industries
- Government and public policy
- Intellectual property/patent law
- Consulting/venture capital
- Science writing and communication
- Science education and outreach
An interdepartmental program offered jointly by the departments of Chemistry and Biology focuses on the intersections of these two subject areas, encompassing Biochemistry and Chemical Biology. There is flexibility in the elective subjects and the lab tracks that enables students to tailor their major program to their specific interests. For more information see chemistry.mit.edu.

### Biology Restricted Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Semester</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.080</td>
<td>Spring</td>
<td>Fundamentals of Chemical Biology</td>
</tr>
<tr>
<td>7.093*</td>
<td>Spring</td>
<td>Modern Biostatistics</td>
</tr>
<tr>
<td>7.094*</td>
<td>Spring</td>
<td>Modern Computational Biology</td>
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<tr>
<td>7.200</td>
<td>Fall</td>
<td>Human Physiology</td>
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<tr>
<td>7.21</td>
<td>Fall</td>
<td>Microbial Physiology</td>
</tr>
<tr>
<td>7.230</td>
<td>Spring</td>
<td>Immunology</td>
</tr>
<tr>
<td>7.24</td>
<td>Spring</td>
<td>Advanced Concepts in Immunology</td>
</tr>
<tr>
<td>7.26</td>
<td>Spring</td>
<td>Molecular Basis of Infectious Disease</td>
</tr>
<tr>
<td>7.27</td>
<td>Spring</td>
<td>Principles of Human Disease and Aging</td>
</tr>
<tr>
<td>7.28</td>
<td>Spring</td>
<td>Molecular Biology</td>
</tr>
<tr>
<td>7.29J</td>
<td>Spring</td>
<td>Cellular and Molecular Neurobiology</td>
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<tr>
<td>7.30</td>
<td>Fall</td>
<td>Fundamentals of Ecology</td>
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<tr>
<td>7.32</td>
<td>Fall</td>
<td>Systems Biology</td>
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<tr>
<td>7.33J</td>
<td>Spring</td>
<td>Evolutionary Biology: Concepts, Models and Computation</td>
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<tr>
<td>7.35</td>
<td>Spring</td>
<td>Human Genetics and Genomics</td>
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<tr>
<td>7.371^</td>
<td>Fall</td>
<td>Biological and Engineering Principles Underlying Novel Biotherapeutics</td>
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<tr>
<td>7.45</td>
<td>Fall</td>
<td>The Hallmarks of Cancer</td>
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<td>7.46</td>
<td>Fall</td>
<td>Building with Cells</td>
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<tr>
<td>7.490</td>
<td>Spring</td>
<td>Developmental Neurobiology</td>
</tr>
<tr>
<td>9.17</td>
<td>Fall</td>
<td>Systems Neuroscience Laboratory (CI-M)</td>
</tr>
<tr>
<td>9.263</td>
<td>Spring</td>
<td>Principles and Applications of Genetic Engineering for Biotechnology and Neuroscience</td>
</tr>
</tbody>
</table>

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BIOLOGY UNDERGRADUATE STUDENT ASSOCIATION (BUSA)

The Biology Undergraduate Student Association (BUSA) serves all MIT students with an interest in biology. BUSA helps to broaden the biology undergraduate experience through both social and academic activities.

Contact us at: bexec@mit.edu

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LABORATORY/RESEARCH

- Students gain hands-on biology laboratory research experience through 7.002/7.003.
- Undergraduate Research Opportunities Program (UROP)
- Students who demonstrate outstanding research effort may participate in the annual Undergraduate Research Symposium.