CHEMICAL ENGINEERING (COURSE 10-C)

Department of Chemical Engineering (http://catalog.mit.edu/schools/engineering/chemical-engineering/#undergraduatetext)

Bachelor of Science as Recommended by the Department of Chemical Engineering

Students planning to follow this curriculum must submit a statement of goals and a coherent program of subjects no later than the spring term of their junior year.

General Institute Requirements (GIRs)
The General Institute Requirements include a Communication Requirement that is integrated into both the HASS Requirement and the requirements of each major; see details below.

Summary of Subject Requirements

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Humanities, Arts, and Social Sciences (HASS) Requirement; at least two of these subjects must be designated as communication-intensive (CI-H) to fulfill the Communication Requirement.</td>
<td>8</td>
</tr>
<tr>
<td>Restricted Electives in Science and Technology (REST) Requirement [can be satisfied by 5.60 and 18.03 in the Departmental Program]</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Requirement (12 units) [can be satisfied by 3.014, 6.111, 10.702[J], or 15.301 in the Departmental Program]</td>
<td>1</td>
</tr>
<tr>
<td>Total GIR Subjects Required for SB Degree</td>
<td>17</td>
</tr>
</tbody>
</table>

Physical Education Requirement
Swimming requirement, plus four physical education courses for eight points.

Departmental Program
Choose at least two subjects in the major that are designated as communication-intensive (CI-M) to fulfill the Communication Requirement.

<table>
<thead>
<tr>
<th>Departmental Requirements</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.60</td>
<td>Thermodynamics and Kinetics</td>
</tr>
<tr>
<td>10.10</td>
<td>Introduction to Chemical Engineering</td>
</tr>
<tr>
<td>10.213</td>
<td>Chemical and Biological Engineering Thermodynamics</td>
</tr>
<tr>
<td>10.301</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>10.302</td>
<td>Transport Processes</td>
</tr>
<tr>
<td>18.03</td>
<td>Differential Equations</td>
</tr>
</tbody>
</table>

Restricted Electives

Students must choose electives that form a coherent plan of study. Students must include two restricted electives selected according to the following lists. 2

Select one of the following:

- 3.014 Materials Laboratory (CI-M)
- 6.152[J] Micro/Nano Processing Technology (CI-M)
- 10.702[J] Introduction to Experimental Biology and Communication (CI-M)
- 10.26 Chemical Engineering Projects Laboratory (CI-M)
- 10.27 Energy Engineering Projects Laboratory (CI-M)
- 10.28 Chemical-Biological Engineering Laboratory (CI-M)
- 10.29 Biological Engineering Projects Laboratory (CI-M)
- 10.467 Polymer Science Laboratory (CI-M)

Select one additional subject from the above list or the following:

- 6.021[J] Cellular Neurophysiology and Computing (CI-M)
- 6.033 Computer Systems Engineering (CI-M)
- 6.111 Introductory Digital Systems Laboratory (CI-M)
- 14.05 Intermediate Macroeconomics (CI-M)
- 15.279 Management Communication for Undergraduates (CI-M)
- 15.301 People, Teams, and Organizations Laboratory (CI-M)

Units in Major | 168

Unrestricted Electives | 48

Units in Major That Also Satisfy the GIRs | (24-36)

Total Units Beyond the GIRs Required for SB Degree | 180-192

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. 18.032 Differential Equations is also an acceptable option.

2. If the student chooses to include a subject from the second list of Restricted Electives (6.021[J]–15.301), the subject must fit logically within the plan of study.