ENGINEERING (COURSE 1-ENG)

Department of Civil and Environmental Engineering (https://catalog.mit.edu/schools/engineering/civil-environmental-engineering/#undergraduatetext)

Bachelor of Science in Engineering

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>Subjects</th>
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<tbody>
<tr>
<td>Science Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Humanities, Arts, and Social Sciences (HASS)</td>
<td>8</td>
</tr>
<tr>
<td>Restricted Electives in Science and Technology (REST) Requirement [can be satisfied by 1.000 and 18.03 in the Departmental Program]</td>
<td>2</td>
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<tr>
<td>Laboratory Requirement (12 units) [can be satisfied from among 1.101 and 1.102 or 1.106 and 1.107 in the Departmental Program]</td>
<td>1</td>
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<tr>
<td>Total GIR Subjects Required for SB Degree</td>
<td>17</td>
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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.

18.03 Differential Equations

Core Subjects
Select one area of core coursework 54-66

1.018[J] Fundamentals of Ecology
1.060 Fluid Mechanics
1.061A Transport Processes in the Environment I
1.070A[J] Introduction to Hydrology and Water Resources
1.080 Environmental Chemistry
1.091 Traveling Research Environmental eXperience (TREX): Fieldwork
1.106 Environmental Fluid Mechanics Laboratory (CI-M)

Mechanics/Materials
1.035 Mechanics of Materials
1.036 Structural Mechanics and Design
1.050 Solid Mechanics
1.056[J] Introduction to Structural Design
1.060 Fluid Mechanics
1.102 Introduction to Civil and Environmental Engineering Design II (CI-M)

Systems
1.020 Modeling and Decision-Making for Sustainability
1.022 Introduction to Network Models
1.041[J] Transportation: Foundations and Methods
1.075 Water Resource Systems
1.102 Introduction to Civil and Environmental Engineering Design II (CI-M)

Elective Subjects with Engineering Content 2
Students are required to take at least four Restricted Electives selected from subjects offered within or outside CEE to form a coherent program of study under supervision by CEE faculty.

Units in Major 156-180
Unrestricted Electives 2 48-60
Units in Major That Also Satisfy the GIRs (36)

Total Units Beyond the GIRs Required for SB Degree 180-198

The units for any subject that counts as one of the 17 GIR subjects cannot also be counted as units required beyond the GIRs.
Students are expected to take 6-unit 1.013 twice.

In order to reach the 180 units beyond the GIRs required, students may need to take more than 48 units of Restricted and/or Unrestricted Electives. Direct requests for more information to cee-apo@mit.edu.