MECHANICAL AND OCEAN ENGINEERING
(COURSE 2-OE)

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

Bachelor of Science in Mechanical and Ocean 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 | Subjects
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Science Requirement | 6
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. | 8
Restricted Electives in Science and Technology (REST) Requirement [can be satisfied by 2.001 and 18.03 in the Departmental Program] | 2
Laboratory Requirement (12 units) [can be satisfied by 2.671 in the Departmental Program] | 1
Total GIR Subjects Required for SB Degree | 17

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.

Required Subjects | Units
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2.001 | Mechanics and Materials I 12
2.002 | Mechanics and Materials II 12
2.003[J] | Dynamics and Control I 12
2.004 | Dynamics and Control II 12
2.005 | Thermal-Fluids Engineering I 12
2.016 | Hydrodynamics 12
2.017[J] | Design of Electromechanical Robotic Systems 12
2.019 | Design of Ocean Systems (CI-M) 12
2.065 | Acoustics and Sensing 12
2.086 | Numerical Computation for Mechanical Engineers 12
2.612 | Marine Power and Propulsion 12
2.670 | Mechanical Engineering Tools 1 3
2.671 | Measurement and Instrumentation (CI-M) 12
18.03 | Differential Equations 12

Restricted Electives
Select one elective from the Restricted Electives list below: 1

Units in Major | 171
Unrestricted Electives | 48
Units in Major That Also Satisfy the GIRs | (36)
Total Units Beyond the GIRs Required for SB Degree | 183

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 Consult the MechE Undergraduate Office, Room 1-110, regarding substitutions.

Restricted Electives
2.006 | Thermal-Fluids Engineering II 12
2.007 | Design and Manufacturing I 12
2.008 | Design and Manufacturing II 12
2.092 | Finite Element Analysis of Solids and Fluids I 12
2.12 | Introduction to Robotics 12
2.14 | Analysis and Design of Feedback Control Systems 12
2.51 | Intermediate Heat and Mass Transfer 12
2.60[J] | Fundamentals of Advanced Energy Conversion 12
2.700 | Principles of Naval Architecture 12
2.72 | Elements of Mechanical Design 12
2.96 | Management in Engineering 12
2.THU | Undergraduate Thesis 12