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
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
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]		12
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