

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[[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[[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[[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