

## MECHANICAL AND OCEAN ENGINEERING (COURSE 2-OE)

Department of Mechanical Engineering (<https://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
<b>Total GIR Subjects Required for SB Degree</b>	<b>17</b>

#### 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
2.00A Designing for the Future: Earth, Sea, and Space	9
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 (CI-M)	12
2.065 Acoustics and Sensing	12
2.086 Numerical Computation for Mechanical Engineers	12
2.612 Marine Power and Propulsion	12

2.671	Measurement and Instrumentation (CI-M)	12
2.677	Design and Experimentation for Ocean Engineering	6
2.678	Electronics for Mechanical Systems	6
18.03	Differential Equations	12

#### Restricted Electives

Select one elective from the Restricted Electives list below.<sup>1</sup>

<b>Units in Major</b>	<b>177</b>
<b>Unrestricted Electives</b>	<b>48</b>
Units in Major That Also Satisfy the GIRs	(36)
<b>Total Units Beyond the GIRs Required for SB Degree</b>	<b>189</b>

The units for any subject that counts as one of the 17 GIR subjects cannot also be counted as units required beyond the GIRs.

<sup>1</sup> Consult the MechE Undergraduate Office, Room 1-110, regarding substitutions.

#### Restricted Electives

2.006	Thermal-Fluids Engineering II	12
2.008	Design and Manufacturing II	12
2.013	Engineering Systems Design	12
2.014	Engineering Systems Development	12
2.019	Design of Ocean Systems	12
2.12	Introduction to Robotics	12
2.14	Analysis and Design of Feedback Control Systems	12
2.700	Principles of Naval Architecture	12
2.96	Management in Engineering	12
2.THU	Undergraduate Thesis	12