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
2.00A  Fundamentals of Engineering Design: Explore Space, Sea and Earth  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.  12

Units in Major  177

Unrestricted Electives  48
Units in Major That Also Satisfy the GIRs  (36)

Total Units Beyond the GIRs Required for SB Degree  189

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.