

Department of **Ocean Engineering**  
Undergraduate – Ocean Engineering  
FACULTY OF MARINE TECHNOLOGY  
**INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS)**

Smt	Code	Courses	Credits
1	IG1101	Islam Education*	2
1	IG1102	Protestant Education*	2
1	IG1103	Catholic Education*	2
1	IG1104	Hindu Education*	2
1	IG1105	Buddha Education*	2
1	IG1108	English	3
1	MO1200	Engineering Chemistry	3
1	MO1201	Physics	3
1	MO1202	Engineering Mathematics I	3
1	MO1301	Computer Programming	2
1	MT1201	Introduction to Ocean Engineering	2
2	IG1106	Concept of Nationalism	3
2	MO1203	Mechanical and Material Technology	3
2	MO1204	Engineering Mechanics I	3
2	MO1205	Marine Physics	2
2	MO1206	Engineering Mathematics II	3
2	MO1209	Engineering Drawing	2
2	MO1302	Theory in Floating Building I	2
3	MO1207	Numerical Methods	3
3	MO1208	Engineering Mechanics II	4
3	MO1212	Operation and Optimization Research	2
3	MO1303	Theory in Floating Building II	3
3	MO1304	Lines Plan	2
3	MO1305	Fluid Mechanics	3
3	MO1309	Oceanography	3
4	IG1107	Concept of Scientific Technology and Communication	3
4	MO1210	Soil Mechanics	3
4	MO1306	Marine Building Construction and Design I	3

Smt	Code	Courses	Credits
4	MO1307	Hydrodynamics I	3
4	MO1308	Hydrostatic and Bonjean Curves	2
4	MO1311	Coastal Processing	3
4	MO1312	Coastal Protection Structure	3
5	MO1211	Sea Building Foundation	3
5	MO1213	Risk, Reliability and Engineering Statistics	3
5	MO1214	Finite Element Method	3
5	MO1313	Marine Building Construction and Design II	3
5	MO1314	Coastal Structure Design	2
5	MO1322	Hydrodynamics II	3
6	MO1215	Research Methods	2
6	MO1315	Static Offshore Structure Design	2
6	MO1316	Structural Dynamics Analysis I	3
6	MO1317	Marine Operation and System	2
6	MO1318	Marine Building Construction and Design III	3
7	IG1109	Technopreneurship	3
7	MO1310	Hydrocarbon Processing and Reservoir Technology	3
7	MO1319	Structural Dynamics Analysis II	3
7	MO1320	Offshore Building Reparation and Production Technology	3
7	MO1321	Dynamical Offshore Structure Design	2
7	MO1323	Welding Inspection and Technology	3
7	MO1401	Experimental Hydrodynamics**	3
7	MO1406	Shipyards Management and Technology**	3
7	MO1408	Marine Concrete Structure**	3
7	MO1410	Theory in Plate and Shell**	3
7	MO1412	Harbor Management and	3

Smt	Code	Courses	Credits
		Design**	
7	MO1413	Dredging and Reclamation**	3
7	MO1414	Physical and Numerical Modeling**	3
7	MO1416	Layer Boundary Turbulent and Modeling**	3
7	MO1418	Hydro-Oceanographic Survey**	3
7	MO1421	Marine Geology and Geophysics**	3
7	MO1422	Marine Geology and Geophysics**	3
7	MO1425	Disaster Management**	3
7	MO1426	Corrosion**	3
7	MO1427	Ocean Outfall**	3
8	MO1216	Engineering Economics	2
8	MO1324	Fatigue and Fracture Mechanics	3
8	MO1325	Practical Work	2
8	MO1326	Final Project	6
8	MO1327	Underwater Pipe Design and Planning	3
8	MO1402	Floating Building **	3
8	MO1403	Drive System and Resistance**	3
8	MO1404	Risk-Based Design**	3
8	MO1405	Underwater Work and System**	3
8	MO1407	Industrial Management**	3
8	MO1409	Design of Advanced Steel Structure**	3
8	MO1411	Marine Structure Engineering Innovation**	3
8	MO1415	Sediment Transportation Technology and Mechanics**	3
8	MO1417	Remote Sensing and Geographic Information System**	3
8	MO1419	Integrated Coastal Zone	3

\* Select one of those with stars

\*\* Elective courses



Department of **Ocean Engineering**  
Undergraduate – Ocean Engineering  
FACULTY OF MARINE TECHNOLOGY  
**INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS)**

Smt	Code	Courses	Credits
		Management (ICZM)**	
8	MO1420	Marine Pollution**	3

Smt	Code	Courses	Credits
8	MO1423	Energy Conversion**	3
8	MO1424	Integrated Marine Resource Management**	3

\* Select one of those with stars

\*\* Elective courses