

Department of **Naval Architecture and Shipbuilding Engineering**  
Undergraduate – Naval Architecture and Shipbuilding 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	IG1110	Khonghucu Education*	2
1	MN1211	Technical Drawing and Introduction to CAD	3
1	MN1212	Material and Mechanical Technology	3
1	MT1201	Introduction to Ocean Engineering	2
1	SF1201	Physics I	3
1	SM1203	Calculus I	3
2	IG1106	Concept of Nationalism	3
2	IG1108	English	3
2	MN1221	Engineering Mechanics I	4
2	MN1321	Theory in Ship Building I	3
2	SF1202	Physics II	4
2	SM1202	Calculus II	3
3	MN1202	Introduction to Economic Theory	3
3	MN1231	Engineering Mathematics	3
3	MN1232	Fluid Mechanics	3
3	MN1233	Engineering Mechanics II	3
3	MN1234	Introduction to Computer and Programming	2
3	MN1304	Ship Design I	3
3	MN1306	Operation Research	3
3	MN1307	Engineering Economics	3
3	MN1308	Ship Lines Plan Assignment	2
3	MN1331	Ship Construction I	3
3	MN1332	Ship Equipment	2
3	MN1333	Theory in Ship Building II	3

Smt	Code	Courses	Credits
4	MN1204	Ship Equipment	3
4	MN1205	Ship Propulsion and Barrier	3
4	MN1206	Ship Machinery and System	3
4	MN1241	Statistics and Probability	2
4	MN1309	Sea Transportation Network Analysis	3
4	MN1310	Economics of Sea Transport	3
4	MN1341	Vessel Design I	3
4	MN1342	Ship Propulsion and Barrier	4
4	MN1343	Ship Strength	3
4	MN1344	Ship Construction II	3
4	MN1345	Marine System	2
4	MN1346	Lines Plan assignment	2
5	MN1208	Ship Strength and Construction	3
5	MN1209	Ship Design II	3
5	MN1251	Statutory Rules	2
5	MN1252	Finite Element Application and Theory	3
5	MN1311	Harbor Design	3
5	MN1312	System Analysis	3
5	MN1313	Decision Making Methods	3
5	MN1314	Ship Designing Assignment	4
5	MN1351	Ship Dynamics	4
5	MN1352	Vessel Design II	3
5	MN1353	Ship Machinery	3
5	MN1355	Ship Design Assignment I	4
5	MN1356	Corrosion	3
5	MN1357	Ship Production Management	3
5	MN1358	Marine Survey and Inspection	3
5	MN1359	Ship Conversion and Repair Technology	3
5	MN1390	Compulsory 1	3

Smt	Code	Courses	Credits
5	MN1391	Compulsory 2	3
5	MN1392	Compulsory 3	3
5	MN1393	Compulsory 4	3
6	IG1107	Concept of Scientific Technology and Communication	3
6	MN1261	Ship Production Technology	3
6	MN1292	Risk Management	3
6	MN1315	Shipping Business	3
6	MN1316	Logistic Engineering	3
6	MN1317	Harbor Management	3
6	MN1361	Ship Vibration	3
6	MN1362	Ship Hydrodynamics	3
6	MN1363	Welding Technology	3
6	MN1364	Ship Design Assignment II	4
6	MN1365	Advanced Ship Production Management	3
6	MN1366	Shipping Business	3
6	MN1367	Ship Production Technology	3
6	MN1394	Compulsory 5	3
6	MN1395	Compulsory 6	3
6	MN1396	Compulsory 7	3
7	IG1109	Technopreneurship	3
7	MN1214	Statutory Rules	2
7	MN1271	Research Method	2
7	MN1272	Optimization Application and Theory	3
7	MN1318	Ship Insurance and Cost	3
7	MN1319	Sea Transportation Modeling	3
7	MN1320	Sea Transportation Telematics	3
7	MN1371	Computer-Aided Vessel Design	3
7	MN1372	Ship Design Assignment II	4
7	MN1373	Welding Inspection	3

\* Select one of those with stars

\*\* Elective courses

Department of **Naval Architecture and Shipbuilding Engineering**  
Undergraduate – Naval Architecture and Shipbuilding Engineering  
FACULTY OF MARINE TECHNOLOGY  
**INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS)**

Smt	Code	Courses	Credits
7	MN1374	Advanced Ship Production Technology	3
7	MN1375	Ship Production Assignment	4
7	MN1376	Sea Transportation Planning Assignment	4
7	MN1397	Compulsory 8	3
7	MN1398	Compulsory 9	3
7	MN1399	Field Assignment III	4
8	MN1293	Strategic Management	3
8	MN1381	Practical Work	2
8	MN1401	Ship Repair and Production**	3
8	MN1402	Ship Valuation**	3
8	MN1403	Archipelago Infrastructure Design**	3

Smt	Code	Courses	Credits
8	MN1404	Advanced Harbor Design**	3
8	MN1405	Supply Chain Management**	3
8	MN1406	Multimodal Transportation**	3
8	MN1451	Ship Dynamics**	3
8	MN1452	Vessel Design II**	3
8	MN1456	Corrosion**	3
8	MN1458	Marine Survey and Inspection**	3
8	MN1459	Ship Conversion and Repair Technology**	3
8	MN1461	Ship Vibration**	3
8	MN1462	Ship Hydrodynamics**	3
8	MN1465	Advanced Ship Production Management**	3
8	MN1466	Shipping Business**	3
8	MN1471	Computer-Aided Vessel	3

Smt	Code	Courses	Credits
		Design**	
8	MN1473	Welding Inspection**	3
8	MN1474	Advanced Ship Production Technology**	3
8	MN1491	Structure Reliability**	3
8	MN1492	Risk Management**	3
8	MN1493	Strategic Management**	3
8	MN1494	Small Ship Design (L<30M)**	3
8	MN1495	Offshore Building**	3
8	MN1496	Fatigue and Fracture**	3
8	MN1497	Theory in Plate**	3
8	MN1581	Final Project	6

\* Select one of those with stars

\*\* Elective courses