## CURRICULUM

## **B.Sc. in Mechanical Engineering Eight Full-time Semesters**

Nº	COURSES	YEAR	ECTS
1	English Language	1, 2, 3, 4	24
2	Calculus - Linear Algebra And Analytic Geometry	1	5
3	Calculus Mathematical Analysis - part I	1	5
4	Calculus Mathematical Analysis - part II	1	4
5	Calculus Mathematical Analysis - part III	2	2
6	Operation Of Ship Power Plants (SPP)	4	6
7	Engineering Drawing	1	5
8	Computer Sciences	1	5
9	Marine Diesel Engines	3,4	10
10	Marine Steam Boilers	3	5
11	Shipboard Auxiliary Machines And Systems	3	10
12	Shipboard Turbines	4	6
13	Machinery Components	2	7
14	Hydromechanics	2	5
15	Shipboard Manning And Safety	2	2
16	Strength Of Materials	2	6
17	Theoretical Mechanics	1,2	7
18	Theory Of Engines And Machinery		3
19	Thermodynamics	3	5
20	Physics	1	5
21	Automatic Control Of Ship Power Plants	4	5
22	Electrical Mechanics	3	4

23	Shipboard Electrical Equipment	3,4	9	
24	Fundamentals Of Electrical Engineering	2	5	
25	Power Electronics	3	3	
26	Modern Systems For Control Of Main And Auxiliary Engines	4	3	
27	Ship Engineering And Technological Maintenance	2,3,4	15	
28	Engineering Materials	1	4	
29	Industrial Chemistry	3	3	
30	Ship Technical Maintenance And Repair	4	9	
31	Technology Of Engineering Materials	3	6	
32	Seamanship	1	2	
33	Environment Pollution Prevention	4	1	
34	Damage Control	4	4	
35	Naval Architecture And Ship Construction	3	4	
36	Physical Training And Sports	1, 2,3	5	
37	Economics (to select from the list) 1. Introduction in micro-economics 2. Fundamentals of economics theory 3. Personnel management 4. Introduction in macro-economics	1	3	
38	Information Technologies (to select from the list) 1. Programming systems for mathematical modeling 2. IT on the Internet	2	2	
39	Psychology (to select from the list): 1. Social Behavior 2. Psychology in shipping 3. Engineering psychology and ergonomy 4. Psychology of extreme behavior.	1	3	
ADDITIONAL COURSES				
40	English Language	1		
41	English Language - intensive	4		
42	Maritime law	1	2	
43	Russian language	3		
44	Physical Training And Sports	1,2,3,4		
45	Safety of shipping (ISPS code)			
46	Basic training on safety	1		