



## CURRICULUM

Professional orientation: **Transport, Navigation and Aviation**

Program: **Naval Architecture and Marine Technology**

Professional qualification: **Mechanical Engineer**

Educational and qualificational degree: **Bachelor**

Form of study: **Full - Time**

Term of study: **4 years / 8 semesters**

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mathematics, part 1	1				30		30		195	135	330	7
2	Computer Technologies		1			15		30		165	120	285	6
3	Graphical Documentation in Naval Architecture, part 1		1			15		30		205	160	365	8
4	Fundamentals of Shipbuilding and Marine Technology	1				30		15		205	160	365	8
5	Optional Subject				1					30	30	60	1
5a	Specialized Sport Activities, part 1				1						30	30	1
5b	Sport and Social Adaptation, part 1				1						30	30	1
5B	Introduction to Maritime English, part 1				1						30	30	1
<b>Total for the 1 semestar:</b>		<b>2</b>	<b>2</b>		<b>1</b>	<b>90</b>		<b>105</b>		<b>800</b>	<b>605</b>	<b>1405</b>	<b>30</b>
6	Mathematics, part 2	2				30		30		135	75	210	5
7	Chemistry	2				30		15		90	45	135	3
8	Material Science and Technology	2				30		30		135	75	210	5
9	Graphical Documentation in Naval Architecture, part 2		2					30	15	75	45	120	3
10	Physics	2				30	15	15		135	75	210	5
11	Computer Graphics		2			15		30		90	45	135	3
12	English, part 1				2		15			60	45	105	2
13	Optional Subject				2					30	30	60	1
13a	Specialized Sport Activities, part 2				2						30	30	1
13b	Sport and Social Adaptation, part 2				2						30	30	1
13B	Introduction to Maritime English, part 2				2						30	30	1
14	Practical Training, part 1				2					60	60	120	2
15	Introduction Practice				2					30	30	60	1
<b>Total for the 2 semestar:</b>		<b>4</b>	<b>2</b>		<b>4</b>	<b>135</b>	<b>30</b>	<b>150</b>	<b>15</b>	<b>840</b>	<b>525</b>	<b>1365</b>	<b>30</b>
16	Thermal Engineering	3				30		15		135	90	225	5
17	Mechanics	3				30	15	15		165	105	270	6
18	Ship Hydrodynamics	3				30		30		165	105	270	6
19	Graphical Documentation in Naval Architecture, part 3		3			15		30		105	60	165	4
20	English, part 2				3		30			60	30	90	2
21	Optional Subject		3			30	15			135	90	225	5

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
21a	Economics		3			30	15			45	90	135	5
21b	Management of the Industrial Enterprise		3			30	15			45	90	135	5
22	Optional Subject				3					30	30	60	1
22a	Specialized Sport Activities, part 3				3						30	30	1
22b	Sports Management, part 1				3						30	30	1
22B	Introduction to Maritime English, part 3				3						30	30	1
23	Practical Training, part 2				3					60	60	120	2
<b>Total for the 3 semestar:</b>		<b>3</b>	<b>2</b>		<b>3</b>	<b>135</b>	<b>60</b>	<b>90</b>		<b>855</b>	<b>570</b>	<b>1425</b>	<b>31</b>
24	Strength of Materials	4				30	15	15		165	105	270	6
25	Machine Elements	4				30		15	15	150	105	255	6
26	Marine Power Plants	4				30		15		135	90	225	5
27	Electrical Engineering and Electronics	4				30		15		165	120	285	6
28	Statics and Dynamics of Ships and Marine Facilities, part 1		4			30		15	15	150	105	255	6
29	English, part 3		4				30			60	30	90	2
30	Optional Subject				4					30	30	60	1
30a	Specialized Sport Activities, part 4				4						30	30	1
30b	Sports Management, part 2				4						30	30	1
30B	Introduction to Maritime English, part 4				4						30	30	1
<b>Total for the 4 semestar:</b>		<b>4</b>	<b>2</b>		<b>1</b>	<b>150</b>	<b>45</b>	<b>75</b>	<b>30</b>	<b>855</b>	<b>585</b>	<b>1440</b>	<b>32</b>
31	Marine Facilities Systems	5				30		30		195	135	330	7
32	Statics and Dynamics of Ships and Marine Facilities, part 2	5				30		15		165	120	285	6
33	Resistance, Propulsion and Maneuvering of Ships and Marine Facilities, part 1		5			30		15		165	120	285	6
34	Electrical Equipment of Ships and Marine Facilities	5				30		15		135	90	225	5
35	Technical Safety		5			15				60	45	105	2
36	English, part 4				5		15			60	45	105	2
37	Optional Subject		5			30				90	60	150	3
37a	Philosophy		5			30				30	60	90	3
37b	History of the Technique		5			30				30	60	90	3
<b>Total for the 5 semestar:</b>		<b>3</b>	<b>3</b>		<b>1</b>	<b>165</b>	<b>15</b>	<b>75</b>		<b>870</b>	<b>615</b>	<b>1485</b>	<b>31</b>
38	Structural Mechanics of Ships and Marine Facilities	6				30		30		195	135	330	7
39	Resistance, Propulsion and Maneuvering of Ships and Marine Facilities, part 2	6				30		30		135	75	210	5
40	Resistance, Propulsion and Maneuvering of Ships and Marine Facilities, project			6					30	30	30	60	2
41	Vibrations of Ships and Marine Facilities	6				15		15		90	60	150	3
42	Welding of Marine Structures	6				30		30		120	60	180	4
43	Strength and Structure of Ships and Marine Facilities, part 1		6			30		15		135	90	225	5
44	English, part 5				6		30			60	30	90	2
45	Specialized Practice				6					60	60	120	2
<b>Total for the 6 semestar:</b>		<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>135</b>	<b>30</b>	<b>120</b>	<b>30</b>	<b>825</b>	<b>540</b>	<b>1365</b>	<b>30</b>
46	Strength and Structure of Ships and Marine Facilities, part 2	7				30		30		165	105	270	6
47	Strength and Structure of Ships and Marine Facilities, project			7					30	30	30	60	2
48	Devices for Ships and Marine Facilities	7				30		30		165	105	270	6
49	Design of Ships and Marine Facilities, part 1		7			30		15		105	60	165	4
50	Optional Subject		7			30		30		165	105	270	6

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
50a	Technology for Construction of Ships and Marine Facilities		7			30		30		60	105	165	6
50b	Technological Design in Shipbuilding and Ship Repair Industries		7			30		30		60	105	165	6
51	Optional Subject	7				30		30		135	75	210	5
51a	Architecture of Ships and the Marine Facilities	7				30		30		60	75	135	5
51b	Sea Transport Technology and Organization	7				30		30		60	75	135	5
51c	Technology and Organization of Port Activities	7				30		30		60	75	135	5
51d	Fleet and Ports Operation	7				30		30		60	75	135	5
52	English, part 6				7		15			60	45	105	2
<b>Total for the 7 semestar:</b>		<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>150</b>	<b>15</b>	<b>135</b>	<b>30</b>	<b>825</b>	<b>525</b>	<b>1350</b>	<b>31</b>
53	Design of Ships and Marine Facilities, part 2	8				30		30		165	105	270	6
54	Design of Ships and Marine Facilities, project			8					30	30	30	60	2
55	Optional Subject	8				30		15	15	150	105	255	6
55a	Ship Repair Technology	8				30		15	15	60	105	165	6
55b	Fundamentals of the Ship Repair	8				30		15	15	60	105	165	6
56	Optional Subject	8				30		30		165	105	270	6
56a	Automated Systems for Design of Ships and Marine Facilities	8				30		30		60	105	165	6
56b	System Analysis for Design of the Ships and Marine Facilities	8				30		30		60	105	165	6
57	English, part 7	8					30			60	30	90	2
<b>Total for the 8 semestar:</b>		<b>4</b>		<b>1</b>		<b>90</b>	<b>30</b>	<b>75</b>	<b>45</b>	<b>570</b>	<b>375</b>	<b>945</b>	<b>22</b>
<b>Total for all courses of education:</b>		<b>27</b>	<b>14</b>	<b>3</b>	<b>13</b>	<b>1050</b>	<b>225</b>	<b>825</b>	<b>150</b>	<b>6440</b>	<b>4340</b>	<b>10780</b>	<b>237</b>

### Facultative subjects

No	Subject Name	Types of term control				Semester auditorium load incl:					Unsuper-vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis / Preparation for State Examination	8	300	10
Defence of Diploma Thesis / State Examination	8		

**Note:**

The curriculum is valid for teaching in Bulgarian and English language.

The optional subjects with a number 5v, 13v, 22v, 30v are alternative only for students learning in English language

**Accepted from AU with**

Protokol No 10 / 25.04.2016

Changed with Protokol No 11 / 06.06.2016 г.

**Valid for 2016 / 2017 г. academic year.**

Head of Department SME:

/ Assoc. Prof. PhD Haralanov H. /

Dean of Faculty FSB:

/ Assoc. Prof. PhD Dichev Pl. /