



CURRICULUM

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

Program: **Marine Engineering**

Professional qualification: **Marine 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	Higher Mathematics, part 1	1				30		30		60	115	175	7
2	Computer Aided Design, part 1		1					30		30	95	125	5
3	Technical Chemistry	1				30		15		45	105	150	6
4	Technical Drawing		1					30		30	75	105	4
5	Academic Vocational Training I, part 1				1						60	60	2
6	Elective Subject				1						30	30	1
6a	Specialized Sport Activities, part 1				1						30	30	1
6b	Sport and Social Adaptation, part 1				1						30	30	1
7	English, part 1				1		30			30	30	60	2
8	Practical Training, part 1				1						75	75	3
Total for the 1 semester:		2	2		4	60	30	105		195	585	780	30
9	Higher Mathematics, part 2	2				30		30		60	75	135	5
10	Physics	2				30		15		45	90	135	5
11	Material Science and Technology	2				30		30		60	75	135	5
12	Electrical Engineering and Electronics, part 1		2			30		30		60	75	135	5
13	Technical Mechanics	2				30		30		60	75	135	5
14	English, part 2		2				30			30	30	60	2
15	Elective Subject				2						30	30	1
15a	Specialized Sport Activities, part 2				2						30	30	1
15b	Sport and Social Adaptation, part 2				2						30	30	1
16	Academic Vocational Training I, part 2				2						60	60	2
17	Practical Training, part 2				2						75	75	3
Total for the 2 semester:		4	2		3	150	30	135		315	585	900	33
18	Strength of Materials	3				30		30		60	105	165	6
19	Computer Aided Design, part 2		3					30		30	60	90	3
20	Technical Thermodynamics and Heat Transfer	3				30		30		60	75	135	5
21	Fluid Mechanics	3				30		15		45	60	105	4
22	Electrical Engineering and Electronics, part 2	3				30		30		60	75	135	5
23	English, part 3		3				30			30	30	60	2

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
24	Elective Subject				3						30	30	1
24a	Specialized Sport Activities, part 3				3						30	30	1
24b	Sports Management, part 1				3						30	30	1
25	Academic Vocational Training II, part 1				3						60	60	2
26	Practical Training, part 3				3						75	75	3
Total for the 3 semester:		4	2		3	120	30	135		285	570	855	31
27	Machine Elements	4				30		30		60	75	135	5
28	Ship Theory and General Arrangements	4				30		15		45	90	135	5
29	Theory of Mechanisms and Machines	4				30		15		45	90	135	5
30	Marine Hydraulic Machines	4				30		15		45	60	105	4
31	Heat-Engineering Measurements		4			30		15		45	60	105	4
32	English Language - specialized, part 1		4				30			30	30	60	2
33	Elective Subject				4						30	30	1
33a	Specialized Sport Activities, part 4				4						30	30	1
33b	Sports Management, part 2				4						30	30	1
34	Academic Vocational Training II, part 2				4						75	75	3
35	Practical Training, part 4				4						75	75	3
Total for the 4 semester:		4	2		3	150	30	90		270	585	855	32
36	Electrical Equipment of Ships	5				30		30		60	75	135	5
37	Marine Deck Machinery and General Ship Service Systems	5				30		15		45	60	105	4
38	Marine Steam and Gas Turbines	5				30		15		45	90	135	5
39	Maritime Law		5			30		15		45	60	105	4
40	Marine Diesel Engines, part 1				5	30		15		45	60	105	4
41	Marine Auxiliary Machinery	5				30		15		45	60	105	4
42	English Language - specialized, part 2		5				30			30	30	60	2
43	Academic Vocational Training III, part 2				5						60	60	2
44	Practical Training, part 5				5						75	75	3
Total for the 5 semester:		4	2		3	180	30	105		315	570	885	33
45	Automatic Control of Ship Power Systems	6				30		30		60	135	195	7
46	Marine Diesel Engines, part 2	6				30		15		45	120	165	6
47	Marine Diesel Engines, project			6					30	30	60	90	3
48	Technical Safety and Control of Environmental Effects		6			30		15		45	90	135	5
49	Marine Boilers	6				30		15	15	60	90	150	6
50	English Language - specialized, part 3		6				30			30	30	60	2
51	Academic Vocational Training III, part 2				6						75	75	3
52	Practical Training, part 6				6						75	75	3
Total for the 6 semester:		3	2	1	2	120	30	75	45	270	675	945	35
53	Ship Electronics and Microprocessor Systems	7				30		30		60	75	135	5
54	Ship Power Plants, part 1				7	30		15		45	60	105	4
55	Ship Power Plants Testing	7				30		30		60	75	135	5
56	Marine Machinery Building Technology	7				30		30		60	75	135	5
57	Vibrations and Vibrodiagnostics of Marine Machinery	7				30		30		60	75	135	5
58	English Language - specialized, part 4		7				60			60	60	120	4
59	Practical Training, part 7				7						60	60	2
Total for the 7 semester:		4	1		2	150	60	135		345	480	825	30
60	Ship Power Plants, part 2	8				30		15		45	90	135	5

No	Subject Name	Types of term control				Semester auditorium load					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
61	Ship Power Plants, project			8					30	30	30	60	2
62	Technical Maintenance and Repair of Marine Machinery	8				30		30		60	75	135	5
63	Technical Operation of Ship Power Plants	8				30		30		60	105	165	6
64	English Language - specialized, part 5		8				60			60	60	120	4
65	Practical Training, part 8				8						60	60	2
66	Elective Subject				8						960	960	32
66a	Onboard Training				8						960	960	32
66b	Shipyards Training				8						960	960	32
Total for the 8 semester:		3	1	1	2	90	60	75	30	255	1380	1635	56
Total for all courses of education:		28	14	2	22	1020	300	855	75	2250	5430	7680	280

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
1	Additional Training for Seafarers in Compliance with STCW Convention, part 1				2	40		20		60	60	120	4
2	Additional Training for Seafarers in Compliance with STCW Convention, part 2				4	20		6		26	34	60	2
3	Additional Training for Seafarers in Compliance with STCW Convention, part 3				6	12		28		40	50	90	3
4	Additional Training for Seafarers in Compliance with STCW Convention, part 4				7	20		20		40	50	90	3
5	Additional Training for Seafarers in Compliance with STCW Convention, part 5				8	55		40		95	95	190	7

Types of graduation	Semester	Unsupervised load	ECTS credits
State Examination in English	8	300	10
Preparation for State Examinations	8		
State Examination in Marine Engineering	8		

Note:

1. The duration of the optional subject "Onboard Training" or "Shipyard Training" is 6 months. It is conducted after the 4th, 6th and 8th semester and/or partially during the period of state exams preparation.
2. The facultative subjects are a necessary prerequisite for starting a onboard practice aimed at attaining seafarer`s license.
3. The curriculum is valid for teaching in Bulgarian and English language.

Accepted from AU with

Protocol No 11 / 06.06.2016

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Valid from the 2016 / 2017 academic year.

The weekly allocation of the classes is fixed according to the "Structure of the Learning Process" Academic Board adopted for the current academic year.

Head of Department SME:

/ Assoc. Prof. PhD Kostova Ir. /

Dean of Faculty FSB:

/ Assoc. Prof. PhD Hadzhidimov I. /