



TECHNICAL UNIVERSITY OF VARNA

Ratified by:

Rector:

/Prof. Dragomir Dimitrov, PhD/

CURRICULUM

Professional orientation: **TRANSPORT, NAVIGATION AND AVIATION**

Educational and qualification degree: **BACHELOR**

Program: **NAVAL ARCHITECTURE AND MARINE TECHNOLOGY**

Professional qualification: **MECHANICAL ENGINEER (in English Language)**

Form of study: **FULL - TIME**

Term of study: **4 YEARS / 8 SEMESTERS**

Number	Subject name	Types of term control				Auditorium load						Unsupervised load	Total work hours	ECTS credits
		Examination	Progressive assessment	Course project	Approved	Lectures	Seminars			Laboratories	Total load			
							Seminar exercises	Course project	Course work					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Mathematics, part 1	*				30	45				75	135	210	8
2	Physics	*				30	15			15	60	120	180	7
3	Technical Documentation		*			15	30		15		60	150	210	8
4	General Arrangement of Ships		*				30				30	90	120	4
5	English, part 1				*		30				30	30	60	2
6	Elective Subject				*									
a	Specialized Sport Activities, part 1											30	30	1
b	Adapted Physical Activity*													
Total for the 1 semester:		2	2	0	2	75	150	0	15	15	255	555	810	30
7	Mathematics, part 2	*				30	45				75	135	210	8
8	Industrial Chemistry	*				30				15	45	75	120	4
9	Material Science and Technology	*				30				30	60	75	135	5
10	Technical Mechanics	*				30				30	60	75	135	5
11	Electrical Engineering and Electronics		*			30				30	60	75	135	5
12	English, part 2		*				30				30	30	60	2
13	Elective Subject				*									
a	Specialized Sport Activities, part 2											30	30	1
b	Adapted Physical Activity*					(30)	(15)				(45)	(75)	(120)	(4)
14	Introduction Practice				*							30	30	1
Total for the 2 semester:		4	2	0	2	150	75	0	0	105	330	525	855	31

Number	Subject name	Types of term control				Auditorium load						Unsupervised load	Total work hours	ECTS credits
		Examination	Progressive assessment	Course project	Approved	Lectures	Seminars			Laboratories	Total load			
							Seminar exercises	Course project	Course work					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
15	Fluid Mechanics	*				30				15	45	60	105	4
16	Strength of Materials	*				30	15			30	75	105	180	7
17	Computer Science and Computer Technology		*			15				30	45	120	165	6
18	Technical Documentation in Shipbuilding		*			30	15		15	30	90	90	180	7
19	English, part 3		*				30				30	30	60	2
20	Elective Subject				*									
a	Specialized Sport Activities, part 3											30	30	1
b	Adapted Physical Activity*													
21	Practical Training, part 1				*							90	90	3
Total for the 3 semester:		2	3	0	2	105	60	0	15	105	285	525	810	30
22	Thermodynamics and Heat Transfer	*				30				15	45	90	135	5
23	Machine Elements	*				30			15	15	60	105	165	6
24	Ship Hydrodynamics	*				30				15	45	90	135	5
25	Classification Rules and Documentation		*			30				30	60	105	165	6
26	Statics and Dynamics of Ship, part 1		*			30	15		15		60	105	165	6
27	English, part 4				*		30				30	30	60	2
28	Elective Subject				*									
a	Specialized Sport Activities, part 4											30	30	1
b	Adapted Physical Activity*													
Total for the 4 semester:		3	2	0	2	150	45	0	30	75	300	555	855	31
29	Marine Power Plants	*				30				15	45	105	150	6
30	Structure and Strength of Ships, part 1	*				30				30	60	75	135	5
31	Resistance of Ships and Propulsors	*				30				15	45	75	120	4
32	Resistance of Ships and Propulsors, project			*				30			30	75	105	4
33	Welding of Marine Structures		*			30			15	15	60	60	120	4
34	English Language - specialized, part 1		*				30				30	30	60	2
35	Elective Subject				*		30				30	30	60	2
a	Team Management													
b	Management of the Industrial Enterprise													
36	Practical Training, part 2				*							90	90	3
Total for the 5 semester:		3	2	1	2	120	60	30	15	75	300	540	840	30
37	Architecture of Ships and Yachts	*				30			15	15	60	105	165	6
38	Statics and Dynamics of Ship, part 2	*				30			15	15	60	105	165	6
39	Structure and Strength of Ships, part 2	*				30				30	60	105	165	6
40	Structure and Strength of Ships, project			*				30			30	90	120	4
41	Technical Safety and Control of Environmental Effects		*			30	15				45	75	120	4

Number	Subject name	Types of term control				Auditorium load						Unsupervised load	Total work hours	ECTS credits
		Examination	Progressive assessment	Course project	Approved	Lectures	Seminars			Laboratories	Total load			
							Seminar exercises	Course project	Course work					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
42	English Language - specialized, part 2		*				30				30	30	60	2
43	Specialized Practice				*							60	60	2
Total for the 6 semester:		3	2	1	1	120	45	30	30	60	285	570	855	30
44	Ship Design	*				30	15			30	75	135	210	8
45	Ship Systems and Devices	*				30			15	15	60	105	165	6
46	Technology and Organization of Shipbuilding	*				30	15			15	60	120	180	7
47	Technology and Organization of Shipbuilding, project			*				30			30	90	120	4
48	English Language - specialized, part 3		*				30				30	30	60	2
49	Elective Subject				*	15	15				30	75	105	4
a	Communication and Presentation													
b	Philosophy													
Total for the 7 semester:		3	1	1	1	105	75	30	15	60	285	555	840	31
50	Ship Repair Technology	*				30			15	30	75	135	210	8
51	3D Ship Design Systems	*				30	15		15	15	75	135	210	8
52	Ship Design, project			*				30			30	180	210	8
53	English Language - specialized, part 4		*				30				30	90	120	4
Total for the 8 semester:		2	1	1	0	60	45	30	30	45	210	540	750	28
Totals for the whole course of education		22	15	4	12	885	555	120	150	540	2250	4365	6615	241
Facultative Subjects														
1	Engineering Ethics				6	15	30				45	55	100	4
2	Wasteless Technologies and Life Cycle of Materials				8	15				30	45	55	100	4
3	Intellectual Property Law				8	15	15				30	60	90	3
4	Bulgarian Language				1,2		60				60	60	120	4

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			
State Examination in English			

Note:

* The discipline "Adapted Physical Activity" is an alternative to "Specialized Sport Activities", it is studied in the second semester and is intended for students who cannot do sports for health reasons.

Approved by the Academic Board of TU-Varna:

Protocol No 22 / 28.10.2024

Modified with Protocols:

Valid from the 2024/2025 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:

/ Assoc. Prof. Ch. Pirovsky, PhD /

Dean of Faculty:

/ Assoc. Prof. P.Zlateva, PhD /