



TECHNICAL UNIVERSITY OF VARNA

Ratified by:

Rector

/Prof. Rosen Vasilev, PhD/

CURRICULUM

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

Educational and qualification degree: **MASTER**

Programme: **NAVIGATION**

Professional qualification: **ENGINEER-NAVIGATOR**

Form of study: **FULL - TIME**

Term of study: **1.5 YEARS / 3 SEMESTERS**

For holders of educational and qualification degree "Bachelor" in speciality "Navigation"

Number	Subject Name	Forms of assessment				Weekly auditorium load						Unsupervised load	Whole load of students	ECTS credits
		Exams	Inter-semester Evaluation	Course project	Accepted	Lectures	Seminars			Laboratory Exercises	Total load			
							Seminar Exercises	Course project	Assignment					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Voyage Planning and Execution		*			30				15	45	90	135	5
2	Accuracy of Navigational Observations	*				30				15	45	60	105	4
3	Course Setting and Determining Systems		*			15				30	45	45	90	3
4	Collision Regulations, part 3				*					30	30	30	60	2
5	Ship Maneuvering Control	*				15				15	30	30	60	2
6	Forecasting Weather and Oceanographic Conditions for Navigation		*			30	15				45	45	90	3
7	Control of Cargo Handling Operations and Ships's Stability	*				30	0			30	60	60	120	4
8	Operation of Ship Power Plant System				*	30				15	45	45	90	3
9	Cargo Handling and Stowage	*				30	30				60	75	135	5
Total for the 1 semester:		4	3	0	2	210	45	0	0	150	405	480	885	31
10	Ship Handling in Emergencies		*			15					15	15	30	1
11	Ship Handling in Narrow and Shallow Waters	*				15	15				30	75	105	4
12	Ship Handling in Various Conditions	*				15	15				30	75	105	4
13	Coordination of SAR Operations				*	15					15	15	30	1
14	Ensuring Safety of Navigation		*			15				15	30	30	60	2
15	Safety of Cargo Handling Operations	*				15	15				30	45	75	3
16	Ship Repair and Maintenance				*	30				15	45	45	90	3
17	International Maritime Conventions		*			30	30				60	60	120	4
18	Leadership Skills, Personal Safety and Crew Management				*	30	30				60	60	120	4
19	Shipboard Damage Control	*				30	30				60	60	120	4
20	Damaged Ship Stability and Safety		*			15	15				30	30	60	2
Total for the 2 semesters:		4	4	0	3	225	150	0	0	30	405	510	915	32
Totals for the whole course of education		8	7	0	5	435	195	0	0	180	810	990	1800	63
		Forms of assessment				Weekly auditorium load						ad	lents	

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							Seminar Exercises	Course project	Assignment					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Facultative Subjects														
1	Radar, ARPA, Bridge Teamwork, Search and Rescue at Management Level	3				10				30	40	40	80	3
2	Bridge Resource Management and Teamwork	3				20				20	40	40	80	3
3	Navigation with ECDIS & AIS	3				22				20	42	58	100	4
4	Specialised Maritime English	3								45	45	45	90	3
5	Application of Ship Management Software	3				15				45	60	60	120	4

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis	3	375	15
Defense of Diploma Thesis			

Notes:

The curriculum is valid for the training in Bulgarian and English

Approved by the Academic Board of TU-Varna:

Protocol № 17 / 19.12.2016 r.

Modified with Protocols: № 23/25.09.2017 r., № 34/29.10.2018 r.

Valid from 2018/2019 academic year

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

Head of Department:

/Assoc. Prof. B. Dyakov, PhD/

Dean of Faculty:

/Assoc. Prof. I. Hadzhidimov, PhD/

Executive Director of Executive Agency "Maritime Administration":

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