

Rector of

CURRICULUM
academic year 2023-2024

Study program: NAVAL ELECTROMECHANICS
Fundamental domain: ENGINEERING SCIENCES
Bachelor's field: NAVAL ENGINEERING AND NAVIGATION
Faculty: NAVAL ELECTROMECHANICS
Academic degree: Bachelor of Science
The duration of studies: 4 years
Form of education: full time

The mission of study program

Emphasizing the importance of the higher technical education within an extended area which should be flexible, interactive and continuous, according to the European and worldwide requirements in education, preserving national academic traditions. Performing the educational process at a higher level of continuous professional training of specialists in the field and generating and transferring knowledge towards society training future specialists in the maritime and multimodal field and being an unfailing initiator of innovative and creative solutions for regional and European development of transportation.

The general objectives of study program

Training professional engineers in order to acquire competences in designing, building, assembling, exploiting, maintaining and repairing ships, special ships, marine structures and installations, systems and naval equipment (on the quay side or onboard ships), corresponding to the competition economy requirements, naval professionals with engineering, scientific, managerial and complementary knowledge adequate to the present and future needs for naval, shipbuilding and transport perspective and for corresponding industrial sectors. Create the necessary conditions for developing the relation between maritime education and the Romanian and European social and economic field and maintaining a competitive educational offer developed according to the society's demands having as a target to emphasise the importance of scientific research in the activities by increasing quality in the didactic activity, attaining more satisfaction from students, graduates and employers and performing student centred education.

The specific objectives of study program

1. University education for bachelor degree graduates in the field of the Navigation and Marine Engineering, corresponding to the European competitive economy demands, as engineers having the level of scientific, engineering, managerial and complementary knowledge well as the adequate practical skills for the present-day needs and also for the future ones for the naval transport industry, respectively maritime, river and offshore shipbuilding.
2. Extending the training process for specialized engineers in the field of marine engineering and navigation from the perspective of providing the technical-economical and managerial ability necessary for approaching design, fulfilment and optimal exploitation, complete safely, of constructions, systems and equipment specific for the offshore, maritime and river shipbuilding, subjected to European criteria, respectively on a global level, of quality certification.
3. Initiating, in the future, a programme for fundamental and applied scientific research, specific for the marine engineering and navigation field and the corresponding ones, compatible with the contemporary requests and necessities, using the whole creative potential of teaching staff, master degree students and bachelor degree students along with that of famous specialists in this highly requested field with a better and better perspective in Romania, from the point of view of foreign students who come here to study in this field in Constanta Maritime University.
4. Creating the necessary conditions for development, in perspective, the third level of PhD studies in the correspondent field in order to provide completion of the specialized engineering field in marine engineering and navigation with multidisciplinary higher scientific research prerequisites.
5. Continuous improvement of the human didactic and scientific potential (teaching staff and researchers with university and post university adequate training) and material (advanced facilities educational venues resulted from internal and external sources), in order to fulfil requests presented in objectives 1, 2, 3 și 4.

Skills**The professional skills**

Capacity to identify, analyze and describe from a functional point of view the elements of the electromechanical systems in the maritime field; Capacity to analyze physical processes involved in the running of maritime electromechanical systems; Capacity to design electromechanical systems in the maritime field; Capacity to ensure maintenance of the maritime electromechanical systems; Capacity to safely run maritime electromechanical system; Capacity to communicate with experts in other fields, connected to the activities in the field of marine engineering and navigation

The transversal skills

Objective self-evaluation of the continuous professional development and the effective use of linguistic abilities, information technology knowledge and communication with a view to the personal and professional development and better insertion on the labour market and adjustment to the dynamics of its requirements; Efficient use of techniques of human inter-relationships within a multicultural environment, on different hierarchic levels, of written and oral communication and efficient cooperation with experts in multiple fields; Planning, organization and leadership within a team and proof-making of communication abilities; Maintaining a physical fitness for on board activities; Competence in maritime laws in force

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CURRICULUM
Year I

COMPULSORY SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
1	Mathematical Analysis I	XM 1.1.1	DI	DF	3	2	-	-	30	E	4	-	-	-	-	0	-	0
2	Linear algebra, analytic and differential geometry	XM 1.2.1	DI	DF	2	2	-	-	44	E	4	-	-	-	-	0	-	0
3	Computer Science and language programming I	XM 1.3.1	DI	DF	2	-	2	-	44	E	4	-	-	-	-	0	-	0
4	Physics	XM 1.4.1	DI	DF	2	-	2	-	44	E	4	-	-	-	-	0	-	0
5	Chemistry	XM 1.5.1	DI	DF	2	-	1	-	58	E	4	-	-	-	-	0	-	0
6	Descriptive geometry	XM 1.6.1	DI	DF	1	-	1	-	72	C	4	-	-	-	-	0	-	0
7	Multiculturalism	XM 1.7.1	DI	DC	1	1	-	-	22	C	2	-	-	-	-	0	-	0
8	Modern languages (English) I	XM 1.8.1	DI	DC	-	1	-	-	61	C	3	-	-	-	-	0	-	0
9	Physical Education and sport I	XM 1.9.1	DI	DC	-	1	-	-	11	C	1	-	-	-	-	0	-	0
10	Mathematical Analysis II	XM 1.10.2	DI	DF	-	-	-	-	0	-	0	2	2	-	-	44	E	4
11	Computer Science and language programming II	XM 1.11.2	DI	DF	-	-	-	-	0	-	0	2	-	1	-	58	E	4
12	Technical drawing and infographics	XM 1.12.2	DI	DF	-	-	-	-	0	-	0	2	-	2	-	44	C	4
13	Modern languages (English) II	XM 1.13.2	DI	DC	-	-	-	-	0	-	0	-	2	-	-	47	C	3
14	Physical Education and sport II	XM 1.14.2	DI	DC	-	-	-	-	0	-	0	-	1	-	-	11	C	1
15	General Economy	XM 1.15.2	DI	DC	-	-	-	-	0	-	0	1	1	-	-	47	C	3
16	Advanced Mathematics	XM 1.16.2	DI	DF	-	-	-	-	0	-	0	2	2	-	-	44	E	4
Total hours (CP) per week					13	7	6	0	386	5E+4C	30	9	8	3	0	295	3E+4C	23
					26			27.57	20				21.07					

Note: The number of hours of individual study/course/semester is calculated using the formula: SI = CP x 25 - 14 (C+S+L+P)

DF - fundamental disciplines DD - Domain Disciplines DS - specialty disciplines DC - complementary disciplines

DI - obligatory disciplines DO - elective disciplines DF- optional disciplines

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ELECTIVE SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
Package A																		
17	Naval training	XM 1.17.2	DO	DD	-	-	-	-	0	-	0	2	1	-	-	33	C	3
18	Mechanical processing and dimensional control	XM 1.18.2	DO	DD	-	-	-	-	0	-	0	2	2	-	-	44	E	4
Package B																		
17	Seamanship	XM 1.17.2	DO	DD	-	-	-	-	0	-	0	2	1	-	-	33	C	3
18	Materials science and engineering	XM 1.18.2	DO	DD	-	-	-	-	0	-	0	2	2	-	-	44	E	4
Total hours (CP) per week					0	0	0	0	0	0E+0C	0	4	3	0	0	77	1E+1C	7
					0			0	7			5.50						

OPTIONAL SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
19	Medical first aid	XM 1.19.1	DF	DS	1	-	1	-	22	C	2	-	-	-	-	0	-	0
20	Fire prevention and fighting	XM 1.20.1	DF	DS	1	-	1	-	22	C	2	-	-	-	-	0	-	0
21	Marine culture in European civilization	XM 1.21.1	DF	DC	2	1	-	-	8	C	2	-	-	-	-	0	-	0
22	Personal survival techniques	XM 1.22.2	DF	DS	-	-	-	-	0	-	0	1	-	1	-	22	E	2
23	Personal safety and social responsibilities on board ships	XM 1.23.2	DF	DS	-	-	-	-	0	-	0	1	-	1	-	22	E	2
24	Security awareness training & security training for seafarers with designated security duties	XM 1.24.2	DF	DS	-	-	-	-	0	-	0	1	1	-	-	22	C	2
25	Onboard training I	XM 1.25.2	DF	DS	-	-	-	-	0	-	0	4 weeks x56 hours/week				C	2	
26	Volunteering I, II	XM 1.26.1;2	DF	DC	14 weeks x1 hour/week					C(A/R)	2	14 weeks x1 hour/week				C(A/R)	2	
Total hours (CP) per week					4	1	2	0	52	0E+4C	8	3	1	2	0	66	2E+3C	10
					7			3.71	6			4.71						

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Year II

COMPULSORY SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
1	Numerical Methods	XM 2.1.1	DI	DF	2	-	1	-	58	E	4	-	-	-	-	0	-	0
2	Mechanics I	XM 2.2.1	DI	DD	2	1	-	-	33	E	3	-	-	-	-	0	-	0
3	Strength of materials I	XM 2.3.1	DI	DD	4	1	1	-	16	E	4	-	-	-	-	0	-	0
4	English III	XM 2.4.1	DI	DC	-	1	-	-	36	C	2	-	-	-	-	0	-	0
5	Maritime English I	XM 2.5.1	DI	DC	-	2	-	-	22	C	2	-	-	-	-	0	-	0
6	Communication	XM 2.6.1	DI	DC	-	1	-	-	61	C	3	-	-	-	-	0	-	0
7	Physical Education III	XM 2.7.1	DI	DC	-	1	-	-	61	C	3	-	-	-	-	0	-	0
8	Computer-Aided Design	XM 2.8.1	DI	DF	2	-	2	-	19	E	3	-	-	-	-	0	-	0
9	Mechanics II	XM 2.9.2	DI	DD	-	-	-	-	0	-	0	3	1	-	-	19	E	3
10	Strength of materials II	XM 2.10.2	DI	DD	-	-	-	-	0	-	0	2	1	1	-	44	E	4
11	Machine Elements Design I	XM 2.11.2	DI	DD	-	-	-	-	0	-	0	3	1	-	1	30	E	4
12	Thermodynamics I	XM 2.12.2	DI	DD	-	-	-	-	0	-	0	3	2	-	-	30	E	4
13	English IV	XM 2.13.2	DI	DC	-	-	-	-	0	-	0	-	1	-	-	61	C	3
14	Maritime English II	XM 2.14.2	DI	DC	-	-	-	-	0	-	0	-	2	-	-	47	C	3
15	Physical Education IV	XM 2.15.2	DI	DC	-	-	-	-	0	-	0	-	1	-	-	61	C	3
16	Practical training II	XM 2.16.2	DI	DD	-	-	-	-	0	-	0	3 weeks x30 hours/week					C	3
Total hours (CP) per week					10	7	4	0	306	4E+4C	24	11	9	1	1	292	4E+4C	27
					21			21.857	22			20.857						

Note: The number of hours of individual study/course/semester is calculated using the formula: SI = CP x 25 - 14 (C+S+L+P)

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ELECTIVE SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
Package A																		
17	Electrotehnics and electrical machines	XM 2.17.1	DO	DD	2	1	-	-	33	E	3	-	-	-	-	-	-	0
18	Electronics and automation	XM 2.18.1	DO	DD	2	1	1	-	19	E	3	-	-	-	-	-	-	0
19	Navigation concepts and hydrometeorology	XM 2.19.2	DO	DD	-	-	-	-	0	-	0	2	-	-	1	33	E	3
Package B																		
17	Electrotehnics	XM 2.17.1	DO	DD	2	1	-	-	33	E	3	-	-	-	-	0	-	0
18	Materials engineering and dimensional control	XM 2.18.1	DO	DD	2	1	1	-	19	E	3	-	-	-	-	0	-	0
19	Mechanisms	XM 2.19.2	DO	DD	-	-	-	-	0	-	0	2	-	-	1	33	E	3
Total hours (CP) per week					4	2	1	0	52	2E+0C	6	2	0	0	1	33	1E+0C	3
					7			3.71	3			2.36						

OPTIONAL SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
20	Transport and handling of dangerous cargo	XM 2.20.1	DF	DS	1	-	1	-	22	C	2	-	-	-	-	0	-	0
21	Marine environment pollution prevention. MARPOL	XM 2.21.1	DF	DS	1	-	1	-	22	C	2	-	-	-	-	0	-	0
22	Proficiency in survival craft and rescue boats	XM 2.22.1	DF	DS	1	-	1	-	22	C	2	-	-	-	-	0	-	0
23	Cybersecurity	XM 2.23.1	DF	DC	2	-	2	-	19	C	3	-	-	-	-	0	-	0
24	Onboard training	XM 2.24.2	DF	DS	-	-	-	-	0	-	0	4 weeks x56 hours/week				C	2	
25	Volunteering III, IV	XM 2.25.1;2	DF	DC	14 weeks x1 hour/week					C(A/R)	2	14 weeks x1 hour/week				C(A/R)	2	
Total hours (CP) per week					5	0	5	0	85	0E+5C	11	0	0	0	0	0	0E+2C	4
					10			6.07	0			0						

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Year III

COMPULSORY SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
1	Theory and construction of ships	XM 3.1.1	DI	DD	2	0	0	1	58	C	4	0	0	0	0	0	-	0
2	Thermodynamics II	XM 3.2.1	DI	DD	3	0	1	0	69	E	5	0	0	0	0	0	-	0
3	Machine Elements Design II	XM 3.3.1	DI	DD	3	0	0	1	44	E	4	0	0	0	0	0	-	0
4	Applied electronics and automation	XM 3.4.1	DI	DD	2	0	1	0	58	C	4	0	0	0	0	0	-	0
5	Fluid mechanics	XM 3.5.1	DI	DD	3	1	1	0	55	E	5	0	0	0	0	0	-	0
6	Theory of systems and automatic adjustments	XM 3.6.1	DI	DD	2	0	1	0	58	E	4	0	0	0	0	0	-	0
7	Environmental protection	XM 3.7.2	DI	DO	0	0	0	0	0	-	0	1	1	0	0	47	C	3
8	Electrical measurements and transducers	XM 3.8.2	DI	DD	0	0	0	0	0	-	0	2	0	1	0	33	E	3
9	Ethics and academic integrity	XM 3.9.2	DI	DC	0	0	0	0	0	-	0	0	1	0	0	36	C	2
10	Practical training III	XM 3.10.2	DI	DS	0	0	0	0	0	-	0	3 weeks x30 hours/week				C	3	
Total hours (CP) per week					15	1	4	2	342	4E+2C	26	3	2	1	0	116	1E+3C	11
					22				24.429			6				8.2857		

Note: The number of hours of individual study/course/semester is calculated using the formula: SI = CP x 25 - 14 (C+S+L+P)

DF - fundamental disciplines DD - Domain Disciplines DS - speciality disciplines DC - complementary disciplines

DI - obligatory disciplines DO - elective disciplines DF- optional disciplines

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ELECTIVE SUBJECTS

Nr. crt	Course title	Course code	Course category	Course type	Semester I - 14 weeks							Semester II - 14 weeks						
					C	S	L	P	SI	Exam form	Credits points	C	S	L	P	SI	Exam form	Credits points
Package A																		
11	Electrical action systems	XM 3.11.1	DO	DD	2	0	1	1	44	E	4	0	0	0	0	0	-	0
12	Radio electronic equipments and maritime communication	XM 3.12.2	DO	DS	0	0	0	0	0	-	0	3	0	1	1	30	E	4
13	Advancement resistance and propulsion	XM 3.13.2	DO	DD	0	0	0	0	0	-	0	3	0	1	0	19	E	3
14	Advancement resistance and propulsion-pr	XM 3.14.2	DO	DD	0	0	0	0	0	-	0	0	0	0	1	36	C	2
15	Navigation in special conditions	XM 3.15.2	DO	DS	0	0	0	0	0	-	0	3	0	1	1	30	E	4
16	Bridge team management	XM 3.16.2	DO	DS	0	0	0	0	0	-	0	1	1	0	0	47	C	3
17	Naval electrical equipment	XM 3.17.2	DO	DS	0	0	0	0	0	-	0	2	0	1	0	33	C	3
Package B																		
11	Machines and electrical drives	XM 3.11.1	DO	DD	2	0	1	1	44	E	4	0	0	0	0	0	-	0
12	Internal Combustion engines processes and characteristics I	XM 3.12.2	DO	DS	0	0	0	0	0	-	0	3	0	1	1	30	E	4
13	Mechanical onboard systems I	XM 3.13.2	DO	DD	0	0	0	0	0	-	0	3	0	1	0	19	E	3
14	Mechanical onboard systems I -pr	XM 3.14.2	DO	DD	0	0	0	0	0	-	0	0	0	0	1	36	C	2
15	Marine hydraulic machines	XM 3.15.2	DO	DS	0	0	0	0	0	-	0	3	0	1	1	30	E	4
16	International maritime law	XM 3.16.2	DO	DS	0	0	0	0	0	-	0	1	1	0	0	47	C	3
17	Naval electrical devices	XM 3.17.2	DO	DS	0	0	0	0	0	-	0	2	0	1	0	33	C	3
Total hours (CP) per week					2	0	1	1	44			12	1	4	3	195		
					4			3.1429	IE	4	20			13.929	3E+ 3C	19		

OPTIONAL SUBJECTS

Nr. crt	Denumirea disciplinei	Cod disciplină	Categ. disc	Tip disc	Semestrul I - 14 săptămâni							Semestrul II - 14 săptămâni						
					C	S	L	P	SI	FV	PC	C	S	L	P	SI	FV	PC
18	Cybersecurity	XM 3.18.1	DF	DC	2	0	2	0	19	C	3	0	0	0	0	-	0	
19	Maritime english III, IV	XM 3.19.1;2	DF	DC	0	2	0	0	47	C	3	0	2	0	0	47	C	3
20	Onboard training	XM 3.20.2	DF	DS	0	0	0	0	0	-	0	4 weeks x56 hours/week					C	2
21	Volunteering V, VI	XM 3.21.1,2	DF	DC	14 weeks x1 hour/week					A/R	2	14 weeks x1 hour/week					A/R	2
					2	2	2	0	66			0	2	0	0	47		
					6			4.7143	3C	8	2			3.3571	3C	7		

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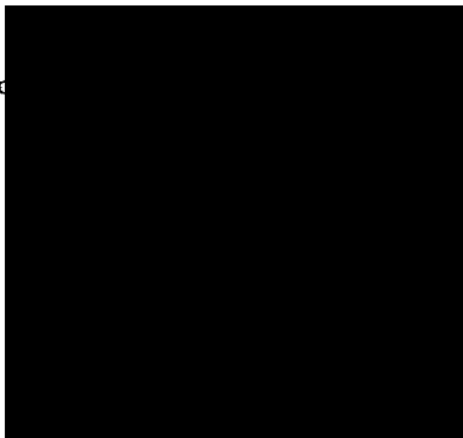
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4th Year

COMPULSORY DISCIPLINES

No	Discipline name	Discipline Code	Categ. disc.	Type disc.	1 st Semester - 14 weeks							2 nd Semester - 14 weeks						
					C	S	L	P	IS	Assess type	Credit points	C	S	L	P	IS	Assess type	Credit points
1	Naval electrical installations	EM 4.1.1	DI	DS	2	-	1	-	30	E	3	-	-	-	-	-	-	-
2	Control of naval propulsion systems	EM 4.2.1	DI	DS	2	-	1	-	30	E	4	-	-	-	-	-	-	-
3	Leadership and teamwork	EM 4.3.1	DI	DS	1	-	2	-	30	C	4	-	-	-	-	-	-	-
4	High voltage	EM 4.4.2	DI	DS	-	-	-	-	-	-	-	1	-	1	-	44	C	3
5	Maintenance and repair of naval vessels in site	EM 4.5.2	DI	DS	-	-	-	-	-	-	-	1	1	-	-	44	C	3
6	Mechanical onboard systems II	EM 4.6.2	DI	DD	-	-	-	-	-	-	-	2	-	1	1	30	E	3
7	Preparation of Bachelor of Science license	EM 4.7.2	DI	DS	-	-	-	-	-	-	-	2 sapt.x30 ore/sapt.				C	4	
8	License exam	EM 4.8.2	DI	DS	-											(10)		
Total hours (compulsory credit points per week)					5	-	4	-	90	2E+1C	11	4	1	2	1	118	1E+3C	13
					9			7,14				8			8,4			

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HEAD OF MARINE ENGINEERING DEPT.
Lecturer

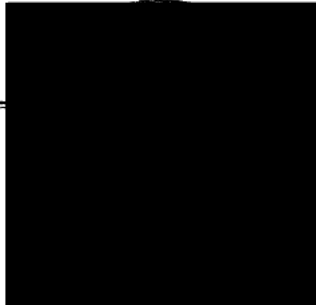


OPTIONAL DISCIPLINES

No	Discipline name	Discipline Code	Categ. disc.	Type disc.	1 st Semester - 14 weeks							2 nd Semester - 14 weeks						
					C	S	L	P	IS	Assess type	Credit points	C	S	L	P	IS	Assess type	Credit points
Package A																		
1	Ship's management and administration	EM 4.1.1	DO	DS	3	-	1	-	40	E	5	-	-	-	-	-	-	
2	Waterways and naval transport relations	EM 4.2.1	DO	DS	2	-	1	-	30	C	4	-	-	-	-	-	-	
3	Propulsion power plants I	EM 4.3.1	DO	DS	4	-	1	1	50	E	5	-	-	-	-	-	-	
4	Propulsion power plants II	EM 4.4.2	DO	DS	-	-	-	-	-	-	-	4	-	1	-	26	E	4
5	Propulsion power plants II - pr	EM 4.5.2	DO	DS	-	-	-	-	-	-	-	-	-	-	1	58	C	2
6	Estimated and costal navigation I	EM 4.6.1	DO	DS	4	-	1	1	40	E	5	-	-	-	-	-	-	
7	Estimated and costal navigation II	EM 4.7.2	DO	DS	-	-	-	-	-	-	-	3	-	1	1	50	E	4
8	Ship's commercial exploitation	EM 4.8.2	DO	DS	-	-	-	-	-	-	-	4	-	2	-	40	C	4
9	Maritime transport theory and techniques	EM 4.9.2	DO	DS	-	-	-	-	-	-	-	2	-	-	1	30	E	3
Package B																		
1	Internal Combustion Engines Processes and Characteristics II	EM 4.1.1	DO	DS	3	-	1	-	40	E	5	-	-	-	-	-	-	
2	Marine refrigerating plants	EM 4.2.1	DO	DS	2	-	1	-	30	C	4	-	-	-	-	-	-	
3	Internal combustion engines dynamics and components	EM 4.3.1	DO	DS	4	-	1	1	50	E	5	-	-	-	-	-	-	
4	Ancillary systems of internal combustion engines	EM 4.4.2	DO	DS	-	-	-	-	-	-	-	4	-	1	-	26	E	4
5	Ancillary systems of internal combustion engines -pr	EM 4.5.2	DO	DS	-	-	-	-	-	-	-	-	-	-	1	58	C	2
6	Steam generators, Steam and gas turbines I	EM 4.6.1	DO	DS	4	-	1	1	40	E	5	-	-	-	-	-	-	
7	Steam generators, Steam and gas turbines II	EM 4.7.2	DO	DS	-	-	-	-	-	-	-	3	-	1	1	50	E	4
8	Exploitation, repair and maintenance of internal combustion engines	EM 4.6.2	DO	DS	-	-	-	-	-	-	-	4	-	2	-	40	C	4
9	Noise and vibrations on board	EM 4.7.2	DO	DS	-	-	-	-	-	-	-	2	-	-	1	30	E	3
Total hours (compulsory credit points per week)					13	-	4	2	170			13	-	4	3	204		
					19			12,1		3E+1C	19	20			14,5	3E+2C	17	

DEAN
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HEAD OF M...ERING DEPT.
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FREE ELECTIVE DISCIPLINES

No	Discipline name	Discipline Code	Categ. disc.	Type disc.	1 st Semester - 14 weeks							2 nd Semester - 14 weeks						
					C	S	L	P	IS	Assess type	Credit points	C	S	L	P	IS	Assess type	Credit points
1	Management and marketing	EM 4.1.2	DF	DC	-	-	-	-	-	-	-	2	1	-	-	6	C	2
2	Maritime english VII, VIII	EM 4.2.1: 2	DF	DC	-	2	-	-	20	C	2	-	2	-	-	20	C	2
3	Cybersecurity	EM 4.3.1	DF	DC	2	-	2	-	16	C	3	-	-	-	-	-	-	-
4	Onboard training	EM 4.4.2	DF	DS	-	-	-	-	-	-	-	12 sapt.x56 ore/sapt.					C	2
5	Volunteering VII, VIII	EM 4.5.1.2	DF	DC	14 weeks x1 hour/week					C(A/R)	2	14 weeks x1 hour/week					C(A/R)	2
Total hours (compulsory credit points per week)					2	2	2	-	36	3C	7	2	3	-	-	26	4C	8
					6			2,5	5			1,8						

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Lecturer Ph. D. Adrian [Redacted]