- Unofficial (translated) reading version -

Course Handbook (incl. Specific Examination and Study Regulations)
for the Master's degree programme
Sustainable Maritime Engineering
at the University of Rostock

Based on § 2 paragraph 1 in conjunction with § 38 paragraph 1 of the State Higher Education Act in the version of the announcement dated January 25, 2011 (GVOBl. M-V p. 18), last amended by the Sixth Act to Amend the State Higher Education Act dated June 21, 2021 (GVOBl. M-V p. 1018), and the Framework Examination Regulations for Bachelor's and Master's degree programmes at the University of Rostock dated November 11, 2022 (Official Announcements of the University of Rostock No. 23/05), last amended by the First Statute to Amend the Framework Examination Regulations for Bachelor's and Master's degree programmes dated December 12, 2023 (Official Announcements of the University of Rostock No. 24/06), the University of Rostock has enacted the following Specific Examination and Study Regulations for the Master's degree programme Sustainable Maritime Engineering as a statute:

Reference: Official announcement no. 3/2025 from 16.01.2025

To provide a version for international students, the original German version dated 13 January 13 2025 has been translated to English.

The reading version applies to students who are enrolled in the Master's degree programme Sustainable Maritime Engineering at the University of Rostock from winter semester 2025/2026 on.

The legally binding nature of the degree programme-specific examination and study regulations, published in the official announcements of the University of Rostock, remain unaffected by this.

Table of Contents

I. General Provisions

§ 1
Scope

(1) This regulation governs the objectives, content, course, and specific regulations for the completion of the research-oriented Master's degree programme Sustainable Maritime Engineering at the University of Rostock based on the Framework Examination Regulations for Bachelor's and Master's degree programmes at the University of Rostock (Framework Examination Regulations (Bachelor/Master)).
(2) For the following modules, which can be studied as part of the elective studies, the admission requirements, examination requirements, examination periods, as well as provisions on the form, duration, and scope of the module examination, as provided in the examination regulations of the respective degree programme, apply in accordance with § 7 paragraph 3 of the Framework Examination Regulations (Bachelor/Master):

- *Reasoning under Uncertainty (IEF)*
- *Maritime Graphics (IEF)*
- *Navigation, Control and Vehicle Autonomy of Maritime Systems (IEF)*

(3) For the language modules, which can be studied as part of the elective studies, the examination regulations for the language offerings of the Language Centre of the University of Rostock, including the university foreign language certificate UNIcert®, apply.

§ 2
Admission Requirements

(1) Admission to the Master's degree programme Sustainable Maritime Engineering is subject to the proof of a first professional university degree or an equivalent degree from a vocational academy and the following additional admission requirements in accordance with § 3 of the Framework Examination Regulations (Bachelor/Master):

1. In accordance with § 3 paragraph 3 of the Framework Examination Regulations (Bachelor/Master), English language skills at level B2 of the Common European Framework of Reference must be demonstrated.
2. Proof of a first professional degree in an engineering science programme with at least 180 credit points or another equivalent degree must be provided.
3. Proof of the acquisition of advanced knowledge in the scope of at least 15 credit points in mathematics, at least ten credit points in technical mechanics, and at least five credit points in fluid mechanics/hydrodynamics must be provided. A maximum of twelve credit points (equivalent to two modules with six credit points each) can be made up during the first year.

(2) Admission to the Master's degree programme Sustainable Maritime Engineering can only be denied if there is no expectation of successful completion of the Master's degree programme, provided there is no admission restriction. The presumption that successful completion of the Master's degree programme is not to be expected applies if:

1. One of the criteria under paragraph 1 numbers 1 to 3 is not met, or
2. The first professional degree was not completed with at least 65% of the CGPA (Cumulative Grade Point Average, equivalent to a grade of 3.0) or with a comparable grade in another grading system, unless the applicant has taken the Graduate Aptitude Test in Engineering (GATE) with at least 500 points instead of the required final grade,
3. And the applicant has not provided any further evidence of the subject-specific and degree programme-specific qualification from which a positive prognosis of success can be derived, taking into account the overall picture. The examination committee may decide to invite the applicant to a clarifying interview. Admission may also be granted conditionally, in the case of an admission restriction in accordance with § 4 Higher Education Admission Act.

II. Degree Programme, Course of Study, and Study Organization

§ 3
Objectives of the Study

(1) Upon successful completion of the Master's degree programme Sustainable Maritime Engineering, students obtain the academic degree Master of Science (M. Sc.).

(2 Building on the Bachelor's degree programme Mechanical Engineering or a comparable engineering science Bachelor's degree programme, students of the Master's degree programme Sustainable Maritime Engineering acquire the ability to solve practical problems using research and scientific methods, taking into account relevant technological, economic, ecological, and social impacts within a reasonable period. They acquire the skill to present the results of scientific work precisely and understandably in oral and written form, but also to critically question statements on the subject and to confidently represent their own position before professional colleagues and laypersons. At the same time, they are capable of collaborating in an interdisciplinary team, so that foreign problems can be identified and scientifically sound solutions can be selected. Graduates of the Master's degree programme are able to successfully pursue scientific activities with the aim of obtaining a doctorate.

§ 4
Double Degree

(1) The University of Rostock and the Universiteit Gent (Belgium) or the Universitatea „Dunărea de Jos" din Galați (Romania) have each agreed on a study programme for the awarding of a so-called double degree. For the simultaneous acquisition of the double degree, students must meet the requirements as set out in the valid version of the double degree agreements of the respective universities. The Dean of Studies and the Study Programme Coordinator for the Faculty of Mechanical Engineering and Marine Technology are available for detailed information. In addition, the following provisions and the corresponding examination and study plan in Appendix 1 apply.

(2) After passing the final examination, the Faculty of Mechanical Engineering and Marine Technology of the University of Rostock awards the academic degree Master of Science (M.Sc.), and the Universiteit Gent or the Universitatea „Dunărea de Jos" din Galați also awards the academic degree Master of Science (M.Sc.). Both academic degrees can be used individually. If both degrees are to be used together, they must be connected by a slash. This also applies to the abbreviated form.

(3) Students are issued a certificate of the passed final examination, a certificate of the awarding of the academic degree, and an English-language diploma supplement by the partners, in compliance with the provisions of the examination regulations of the partners. The certificate, the diploma, and the diploma supplement of the partners are to be connected in such a way that it is clear that it is the evaluation and completion of only one degree programme. The issuance should generally take place at the Universiteit Gent or the Universitatea „Dunărea de Jos" din Galați.

§ 5
Start of Studies, Structure of Studies, Standard Period of Study

(1) The Master's degree programme Sustainable Maritime Engineering can generally be started in the summer and winter semesters. Enrolments take place at the dates specified annually by the administration of the University of Rostock. Applications are generally made online via the university portal or another portal mentioned there. A start in the winter semester is recommended. If the programme is started in the summer semester, the subject-specific study counselling should be contacted for concrete study planning due to the strong limitation of elective options in the elective area.

(2) The Master's degree programme Sustainable Maritime Engineering is offered in English.

(3) The standard period of study, within which the programme should be completed, is four semesters.

(4) The Master's degree programme is divided into compulsory and elective modules. In the compulsory area, seven modules with a total of 66 credit points must be studied. In the "Elective Area Sustainable Maritime Engineering," modules with a total of 36 credit points, in the "Technical Elective Area," modules with a total of twelve credit points, and in the "Non-Technical Elective Area," modules with a total of six credit points must be taken. For the compulsory modules, 30 credit points are allocated to the final examination. A total of at least 120 credit points must be acquired to pass the Master's examination.

(5) There are three elective areas:

1. The "Elective Area Sustainable Maritime Engineering" serves the acquisition of key qualifications and competencies in ship technology, marine technology, and underwater technologies beyond the subject-specific competencies acquired in the compulsory subjects. The educational goal of the elective area is the advanced qualification for a research-oriented professional activity in the areas of ship and offshore structure mechanics, ship and offshore hydromechanics, the design and operation of subsystems and components of ships and offshore structures, as well as the design and operation of underwater vehicles. Students can develop a profile through self-selected modules that are specifically tailored to their future professional field. They have comprehensive knowledge and specific skills in the mentioned areas as well as analytical methods with which they can describe, analyze, and explain connections holistically and soundly.

2. The "Technical Elective Area" serves the acquisition of key qualifications and competencies in technical subjects adjacent to ship and marine technology. The technical elective area allows students to pursue individual inclinations and interests or to meet subject-specific requirements of their future professional field.

3. The "Non-Technical Elective Area" serves the acquisition of interdisciplinary qualifications, enabling graduates to obtain a broad knowledge base that meets future requirements. In addition, they are able to evaluate engineering methods and maritime technologies in the context of scientific considerations and to realize them in terms of sustainability, taking into account social, ecological, and ethical insights, and to communicate them internationally.

(6) In addition to the elective modules listed in Appendix 1, additional modules for the elective areas may be offered. These are announced in due time before the start of the semester by the study office in the usual manner.

(7) Participation in individual modules of this degree programme is dependent on proof of certain prior knowledge or skills. Details can be found in the respective module descriptions.

(8) A proper and, in particular, the adherence to the standard period of study enabling temporal distribution of the modules across the individual semesters can be found in the examination and study plan attached as Appendix 1. The examination and study plan forms the basis for the respective semester study plans, which are made available to students in the usual manner. The temporal sequence and the content coordination of the courses ensure that students can achieve the respective study objectives. There are sufficient opportunities for individual study design.

(9) If there are fewer than three enrolments in elective modules in the respective semester, the module may be cancelled in consultation between the persons responsible for the module and the examination committee. A module may only be cancelled if sufficient elective options remain. If a module is cancelled, students who have chosen such an elective module must alternatively choose another elective module with sufficient enrolment. Furthermore, admission to individual modules in the elective area may be limited by the examination committee for capacity reasons in accordance with § 6c of the Framework Examination Regulations (Bachelor/Master). If individual students are not admitted to the chosen elective module in this case, they must alternatively choose another elective module with sufficient capacity.

(10) Instead of the elective modules explicitly offered for this degree programme, additional modules from the module offerings of other degree programmes at the University of Rostock or other universities may be chosen and recognized, taking into account the qualification objectives of the respective elective area, in consultation with the subject-specific study counseling and the respective module responsible persons. The examination committee decides on recognition on a case-by-case basis. The decision of the examination committee should be made upon application by the student before the start of the semester in which the module to be recognized is to be taken.

Attending such modules at the University of Rostock requires that they are not modules of a restricted admission degree programme, unless a corresponding teaching export is legally established, and sufficient study place capacities are available. The admission requirements, examination requirements, examination periods, as well as provisions on the form, duration, and scope of the module examination, as provided in the examination regulations of the respective degree programme, apply.

(11) Detailed module descriptions are published in the usual manner.

§ 6
Individual Part-time Study

(1) The student may declare to the examination committee no later than two weeks before the start of a semester that they can only spend about half of the time intended for their studies in the following two semesters, in accordance with § 29 paragraph 7 sentence 1 of the State Higher Education Act and the following paragraphs. The application must specify which of the intended modules or module parts will not be completed and in which later semesters the corresponding modules or module parts will be made up. If the examination committee approves the application, it may provide for other modules or module parts to be made up than those listed in the application, especially if this is necessary to ensure proper studies. In hardship cases, the application may also be submitted at a later date.

(2) The application must be addressed to the examination committee and submitted to the study office. If the decision deviates from the application, the student must be heard beforehand. The application can be withdrawn up to two months after the start of the semester.

(3) In the case of paragraph 1, a semester is not counted towards the standard period of study and is therefore not considered in the calculation of the deadlines mentioned in §§ 10 and 17 of the Framework Examination Regulations (Bachelor/Master). During part-time study, other examinations than those specified in the decision of the examination committee cannot be effectively taken; dual study during this time is not permitted. Otherwise, the rights and obligations of the respective students remain unaffected.

(4) Each student can use the regulation according to paragraph 1 a maximum of two times.

(5) If the degree programme is restricted in admission, the examination committee may limit the number of part-time students per semester, but not to less than 5% of the students of the semester. If demand exceeds this number, the examination committee decides taking into account the importance of the reasons presented by the students.

§ 7
Teaching and Learning Forms

Excursions can take place within the framework of all courses of the degree programme. Participation in at least two excursions is mandatory.

§ 8
Attendance Requirement

If specified in the module descriptions, regular participation in exercises and practical courses is required as a prerequisite for examinations in accordance with § 6b of the Framework Examination Regulations (Bachelor/Master).

§ 9
Study Abroad

The Master's degree programme Sustainable Maritime Engineering preferably offers students the opportunity to spend a semester at a foreign university in the second or third semester as an alternative to the examination and study plan. The stay abroad should be prepared early. For this purpose, the student first chooses a thematic focus and usually contacts the "Erasmus+ Coordinator" or the Foreign Coordinator of the Faculty of Mechanical Engineering and Marine Technology and additionally the Rostock International House by the middle of the first semester. The Foreign Coordinator arranges their research partners and helps with the organization of the semester abroad. A list of research partners is maintained. Competencies acquired at the foreign study location are recognized, provided there are no significant differences to the competencies to be acquired within the framework of the Master's degree programme Sustainable Maritime Engineering. To ensure recognition, students and the "Erasmus+ Coordinator" or the Foreign Coordinator of the Faculty of Mechanical Engineering and Marine Technology conclude a learning agreement before starting the stay abroad in accordance with § 5 paragraph 3 of the Framework Examination Regulations (Bachelor/Master).

§ 10
Organization of Studies and Teaching

(1) At the beginning of each semester, a schedule for the entire semester is announced in the usual manner. This includes: lecture times, examination periods, lecture-free periods, and the start of the next semester.

(2) Based on the examination and study plan (Appendix 1), the lecturers report their own courses to the study office for each semester in consultation with the module responsible persons. The report includes information on the subjects, the lecturers, the hours broken down by the various forms of courses, and the timing of the courses. The study office prepares a semester study plan. The concrete semester study plan is made available to students electronically through the central lecture directory.

(3) Lecturers plan courses outside the schedule on their own responsibility and in consultation with the study office. They are supported by the administrative organization of the Faculty of Mechanical Engineering and Marine Technology if necessary. The study office must be informed if it is a course in which examination performances are provided.

(4) The exchange or relocation of courses in justified exceptional cases is organized independently by the lecturers in consultation with the study office.

(5) All special information that the lecturers pass on to students for the organization of teaching must be communicated to the study office beforehand. Special information includes data and facts that deviate from the determinations of the study organization.

III. Examinations

§ 11
Structure of Examinations and Examination Performances

(1) The compilation of the modules to be taken, the type, number, and scope of the examination prerequisites, the type, duration, and scope of the module examinations, the regular examination date, and the credit points to be achieved follow from the examination and study plan (Appendix 1). The final examination (thesis and colloquium) in accordance with § 14 is part of the Master's examination.

(2) In a module, study performances to be provided as prerequisites for admission to the module examination (examination prerequisites) may be determined in accordance with § 7 paragraph 2 of the Framework Examination Regulations (Bachelor/Master). The examination prerequisites can be evaluated and graded but do not count towards the module grade. Examination prerequisites can be: term papers/homework, exercise tasks, reports/documentations, experiment protocols, successful completion of computer exercises, regular participation in courses in accordance with § 8, as well as:

- Term paper: A term paper is a written elaboration of the solution to a given task. It serves to assess the performance level of the students. Term papers must be submitted within a specified period.
- Control work: Control works are written elaborations of the solution to given tasks. They serve to assess the performance level of the students even during the lecture period. Control works must be completed under supervision at a specified location according to the lecturer's instructions.
- The specific examination prerequisite can be found in the respective module description and the examination and study plan (Appendix 1). If several examination prerequisites are available, the announcement of the performances to be provided takes place no later than the second week of the course.

§ 12
Examinations and Examination Periods

(1) The accompanying module examinations are taken in the designated examination period. The examination period of a semester begins immediately after the lecture period and ends with the end of the semester.

(2) The withdrawal declaration of the registration for module examinations must be made via the web portal by the end of the registration period in accordance with § 10 paragraph 3 of the Framework Examination Regulations (Bachelor/Master), after which it must be submitted in writing to the study office. The application for the evaluation of a module examination as a free attempt must be submitted in writing to the study office.

(3) In the case of the last examination attempt, the examiner decides whether an oral examination should be conducted, deviating from the examination form specified in the module handbook. This selection must be made uniformly for all students of a semester.

(4) In the case of a change in a module description, repeat examinations must be taken in accordance with the module description in the version that applied to the examination to be repeated.

§ 13
Admission to the Final Examination

(1) Admission to the final examination is granted to those who meet the following additional admission requirements in accordance with § 25 of the Framework Examination Regulations (Bachelor/Master):

- Proof of the acquisition of at least 84 credit points in this degree programme can be provided, and the modules Principle Analysis of Marine Structures, Design of Offshore Systems, Principles of Marine Fluid Mechanics, Ship Design and Safety of Maritime Systems have been successfully completed.
- Proof of participation in two excursions can be provided.

(2) The student must apply for admission to the final examination in writing to the study office. The location of the final thesis is determined by the examination and study plan. To ensure adherence to the standard period of study, the final thesis must be registered no later than two weeks before the start of the 4th semester. This does not exclude earlier or later registration, unless the other admission requirements are not met.

§ 14
Final Examination

(1) The final examination follows from the module Master Thesis Sustainable Maritime Engineering. It consists of the written final thesis Master Thesis and the colloquium.

(2) The topic selection for the Master Thesis is based on offers from the scientists of the Faculty of Mechanical Engineering and Marine Technology and other faculties of the University of Rostock, other non-university scientific institutions, or according to the students' own proposals, provided a supervisor can be found for it in accordance with § 27 of the Framework Examination Regulations (Bachelor/Master).

(3) The specific task of the Master Thesis is developed by the students together with the supervisor. The supervisor ensures that the task meets the requirements for such a thesis.

(4) The Master Thesis is written in the fourth semester. The processing period is 20 weeks. In individual cases, the examination committee may extend the processing period by a maximum of ten weeks upon justified application. The Master Thesis must be submitted to the study office on time.

(5) The Master Thesis must be written in accordance with the rules for ensuring good scientific practice and avoiding scientific misconduct at the University of Rostock.

(6) The colloquium consists of a presentation of approximately 20 minutes by the student and a discussion of approximately 20 minutes.

(7) For the successful completion of the module Master Thesis Sustainable Maritime Engineering, 30 credit points are awarded. The associated workload of 900 hours consists of 860 hours for the Master Thesis and 40 hours for the colloquium.

§ 15
Evaluation of Examination Performances, Formation of Grades

The examination and study plan (Appendix 1) indicates whether a different weighting of individual examination performances is applied in modules with two examination performances, deviating from § 13 paragraph 4 of the Framework Examination Regulations (Bachelor/Master), and which modules are graded and which are evaluated as "Passed" or "Not Passed." All graded modules are considered in the formation of the overall grade in accordance with § 13 paragraph 6 of the Framework Examination Regulations (Bachelor/Master).

§ 16
Examination Committee and Examination Organization

(1) The examination committee consists of five members, including three members from the group of university professors, one member from the group of scientific staff, and one student member. The term of office of the members is two years, that of the student member is one year.

(2) The planning and organization of the examination process and the review of examination prerequisites are carried out in consultation with the examination committee by the study office. Registration for module examinations is generally done via an online portal. The study office prepares examination plans and announces them.

§ 17
Diploma Supplement

The Diploma Supplement (German and English) with its degree programme-specific information is available as a template via the examination portal of the University of Rostock under "Degree Programmes."

IV. Final Provisions

§ 18
Transitional Provisions

(1) This Specific Examination and Study Regulations apply for the first time to students who are enrolled in the Master's degree programme Sustainable Maritime Engineering at the University of Rostock in the winter semester 2025/26.

(2) For students who started their studies in the Master's degree programme Ship and Marine Technology before the winter semester 2025/26, the regulations of the Specific Examination and Study Regulations dated April 6, 2022, continue to apply, but no longer than until March 31, 2029. They can apply to the examination committee to be examined according to the provisions of the Framework Examination Regulations (Bachelor/Master) and these Specific Examination and Study Regulations. The application is irrevocable. Already completed examination and study performances will be taken over. After the application has been submitted, the changes in the module descriptions also apply to the students who still have to take the module examinations affected by the change. However, repeat examinations must be taken in accordance with the module description in the version that applied to the examination to be repeated.

§ 19
Entry into Force

This regulation comes into force on the day after its publication in the Official Announcements of the University of Rostock. It applies for the first time in the winter semester 2025/26.

Issued based on the resolution of the Academic Senate of the University of Rostock dated [date of Senate resolution] and the approval of the Rector.

Rostock, 26 March 2025

The Rector
of the University of Rostock
University Professor Dr. Elizabeth Prommer

Appendix 1: Examination and Study Plan

Start of studies in the winter semester

Sem.	LP	3	6	9	12	15	18	21	24	27	30	33	36
1	Module	Design of Offshore Systems		Principle Analysis of Marine Structures		Principles of Marine Fluid Dynamics		Safety of Maritime Systems		Ship Design			
2	Module									Technical Obligatory elective subjects*			
3	Module	Team Project		Obligatory elective subjects SME*				Non-technical obligatory elective subjects*					
4	Module	Master Thesis Sustainable Maritime Engineering											

Start of studies in the summer semester

Sem.	LP	3	6	9	12	15	18	21	24	27	30	33	36
1	Module	Obligatory elective subjects SME*				Technical Obligatory elective subjects*		Non-technical obligatory elective subjects*					
2	Module	Design of Offshore Systems		Principle Analysis of Marine Structures		Principles of Marine Fluid Dynamics		Safety of Maritime Systems		Ship Design		Team Project	
3	Module	Obligatory elective subjects SME*								Technical Obligatory elective subjects*			
4	Module	Master Thesis Sustainable Maritime Engineering											

*Modules of this category can change their position within the Personal Study Plan.

Appendix 1: Examination and Study Plan

Legend:

- Compulsory module
- Compulsory module SME
- Obligatory elective subjects SME
- Technical obligatory elective subjects
- Non-technical obligatory elective subjects

E - Excursion
IL - Integrated lecture
Co - Consultation
P - practical lab
Pr - Project
S - Seminar
SPUE - School-based practical exercise
Tu - Tutorial
UE - Exercise
V - Lecture
PL - Examination
A - Final thesis
B/D - Report
HA - Homework
K - Written exam
Koll - Colloquium
mP - Oral examination
pP - Practical examination
PrA - Project work
Prot - Protocol
R/P - Presentation
SL - Course achievement
T - Certificate
LP - Credit points
min - Minutes
RPT - Regular examination date
Std - Hours
SWS - Contact hours
Wo - Weeks

Compulsory modules

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ not graded
			Prerequisites	Type/duration/scope				
Team Project	1552730	V/1; P/3	Compulsory attendance is required for the practical lab	B/D (20 Pages)	6	Winter semester	3	graded
Master Thesis Sustainable Maritime Engineering	1552500		none	1. PL: A (20 Wo, 60-100 Pages) (66,6%) 2. PL: Koll (40 min, 20 min Presentation + 20 min Discussion) (33,3%)	30	every semester	4	graded

Compulsory modules Sustainable Maritime Engineering

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ ungraded
			Prerequisites	Type/Duration/Scope				
Design of Offshore Systems	1552430	V/2; UE/2	Term paper or Assignment (ca. 15 pages)	K (150 min) or mP (30 min)	6	Winter semester	3	graded
Principle Analysis of Marine Structures	1552600	V/2; UE/2	3 Assignments	K (180 min) or mP (30 min)	6	Winter semester	3	graded
Principles of Marine Fluid Mechanics	1552610	V/2; UE/2	none	K (120 min) or mP (30 min)	6	Winter semester	3	graded
Safety of Maritime Systems	1552650	V/2; UE/2	1 Assignment	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Ship Design	1552690	V/2; UE/2	1 Assignment or Presentation (20 min)	K (90 min) or mP (30 min)	6	Winter semester	3	graded

Appendix 1: Examination and Study Plan

Obligatory elective subjects SME

In compliance with § 5 para. 5, modules amounting to 36 credit points from the following catalogue must be taken.

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ ungraded
			Prerequisites	Type/Duration/Scope				
Advanced Analysis of Marine Structures	1552350	V/2; UE/2	3 Assignments	K (180 min) or mP (30 min)	6	Summer semester	3	graded
Advanced Analysis of Offshore Systems	1552360	V/2; UE/2	Term paper or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Summer semester	3	graded
CFD in Maritime Engineering	1552370	V/2; UE/2	none	1. PL: B/D (Term paper (20-30 Pages, 50 hrs)) (50%) 2. PL: mP (20 min) (50%)	6	Winter semester	3	graded
Coding of Finite Elements	1552380	V/2; UE/2	3 Assignments	K (180 min) or mP (30 min)	6	Summer semester	3	graded
Composite Material Design	1552390	IL/4	none	Report and Presentation (20 min Koll) or K (60 min) or mP (20 min)	6	Winter semester	3	graded
Continuum Mechanics	1552400	V/2; UE/2	3 Assignments	K (180 min) or mP (30 min)	6	Winter semester	3	graded
Deep-Sea Technology and Practical Applications of Underwater Technology	1552410	V/2; UE/1; P/1	Compulsory attendance is required for the practical lab; Report or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Winter semester	3	graded
Design of Offshore Aquaculture Systems	1552420	V/2; UE/2	Term paper or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Summer semester	3	graded
Design of Underwater Systems	1552440	V/2; UE/2	Term paper or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Summer semester	3	graded
Experimental Methods in Maritime Engineering	1552470	V/1; UE/1; P/2	Compulsory attendance is required for the practical lab; Term paper or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Summer semester	3	graded

Appendix 1: Examination and Study Plan

Large Engines, Energy Converters and Fuels for Climate Neutral Marine Applications	1552510	V/2; P/2	none	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Modelling and Simulation of Turbulent Flows	1552540	V/2; UE/2	Belegarbeit (ca. 20 Pages)	K (120 min) or mP (30 min)	6	Summer semester	3	graded
Navigation, Control and Vehicle Autonomy of Maritime Systems	1351950	V/2; UE/1; P/1	none	K (150 min) or mP (30 min)	6	Summer semester	3	graded
Ocean Renewable Energies	1552570	V/2; UE/2	Lab report(ca. 15 Pages) and potentially Presentation (20 min)	K (150 min) or mP (30 min)	6	Winter semester	3	graded
Ocean Research Technologies	1552580	V/2; UE/2	Lab report(ca. 15 Pages) and potentially Presentation (20 min)	K (150 min) or mP (30 min)	6	Winter semester	3	graded
Ocean Waves	1552590	V/2; UE/2	Term paper or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Summer semester	3	graded
Resistance and Propulsion	1552630	V/2; UE/2	1 Assignments	K (90 min) or mP (30 min)	6	Summer semester	3	graded
Sailing Theory	1552660	V/2; UE/2	1 Assignments or Presentation (ca. 20 min)	K (90 min) or mP (30 min)	6	Summer semester	3	graded
Seakeeping and Manoeuvring	1552670	V/2; UE/2	1 Assignments	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Selected Topics for the Analysis of Marine Structures	1552680	V/2; UE/2	3 Assignmentsn	K (180 min) or mP (30 min)	6	Winter semester	3	graded
Ship Life Cycle Digitalization	1552700	V/2; UE/2	1 Assignments or Presentation (ca. 20 min)	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Structural Design of Marine Structures	1552710	V/2; UE/2	3 Assignmentsn	K (180 min) or mP (30 min)	6	Summer semester	3	graded
Technical Production Processes of Maritime Structures and Ships	1552750	V/2; UE/2	none	K (60 min)	6	Summer semester	3	graded
Ultimate Strength Assessment of Marine Structures	1552760	V/2; UE/2	3 Assignmentsn	K (180 min) or mP (30 min)	6	Winter semester	3	graded

Appendix 1: Examination and Study Plan

Technical Obligatory elective subjects

In compliance with § 5 para. 5, modules amounting to 12 credit points from the following catalogue must be taken.

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ ungraded
			Prerequisites	Type/Duration/Scope				
Dynamics of Multibody Systems	1552450	V/2; UE/2	Successful completion of computer-based exercises (3 tasks)	K (120 min) or mP (30 min)	6	Winter semester	3	graded
Finite Element Analysis of Composite Structures	1552480	IL/4	none	Report mit Presentation (20 min) or K (60 min) or mP (20 min)	6	Summer semester	3	graded
Introduction to Applied Programming in C++	1552490	V/2; UE/2	none	others (4 term papers, 1 week, 15 Pages, Text des C++ Codes)	6	Winter semester	3	graded
Introduction to Data Science in Materials Science and Engineering	1501760	V/1; P/3	none	R/P (45 min written work)	6	Winter semester	3	graded
Maritime Graphics	1151740	IL/4	none	K (120 min) or mP (20 min)	6	Summer semester	3	graded
Metallic Engineering Materials	1552530	V/3; UE/1	none	K (90 min) or mP (30 min)	6	Summer semester	3	graded
Numerical and Experimental Hydroacoustics	1552560	V/2; UE/2	none	K (90 min) or mP (30 min)	6	Summer semester	3	graded
Numerical Fluid Mechanics and Turbulent Flows	1552550	V/2; UE/2	none	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Principles of Energy Technology: Systems and Applications in a Maritime Context	1552620	V/2; UE/2	none	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Robust Control and State Estimation	1552640	V/3; UE/1; P/1	Compulsory attendance is required for the practical lab; successful completion of 3 practical lab exercises	K (120 min)	6	Summer semester	3	graded
Structural Durability	1552720	V/2; UE/1	none	K (90 min) or mP (30 min)	6	Summer semester	3	graded
Technical Fluids for Sustainable Maritime Applications	1552740	V/2; UE/1; P/1	none	K (90 min) or mP (30 min)	6	Summer semester	3	graded

Appendix 1: Examination and Study Plan

Non-technical Obligatory elective subjects

In compliance with § 5 para. 5, modules amounting to 6 credit points are to be chosen from the following catalogue or the entire range of courses offered by the University of Rostock.

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ ungraded
			Prerequisites	Type/Duration/Scope				
Deutsch A1.1 GER*	9109300	UE/4	Compulsory attendance is required for the exercises and D_A1	B/D (Portfolio work over 14 weeks (5 Pages)) or K (90 min)	6	Every semester	3	graded
Deutsch A1.2 GER*	9109310	UE/4	Compulsory attendance is required for the exercises and D_A1	B/D (Portfolio work over 14 weeks (5 Pages)) or K (90 min)	6	Every semester	3	graded
Professional English for Engineering C1.1 GER*	9101300	UE/4	Compulsory attendance is required for the exercises and C	B/D (Portfolio work over 14 weeks (5 Pages)) or K (90 min)	6	Winter semester	3	graded
Professional English for Engineering C1.2 GER*	9101760	UE/4	Compulsory attendance is required for the exercises and C	PL: B/D (Portfolio work over 14 weeks (5 Pages)) or K ((90-120 min)) (50%) 1. PL: mP (45 min) (50%)	6	Every semester	3	graded
Essentials of Ocean Science and Sustainable Ocean Use	1552460	V/2; S/2	none	K (150 min) or mP (30 min)	6	Summer semester	3	graded
Reasoning under Uncertainty	1151720	IL/4	none	K (120 min) or mP (20 min)	6	irregular occurrence (in the Winter semester only)	3	graded

1 according to §1 paragraph 2, the SPSO of the specified course of study applies

* according to §1 paragraph 3, the examination regulations of the Language Centre apply

D_A1 max. 3 compulsory homework, e.g. written texts of approx. 60-90 words each, oral tasks (approx. 5 minutes) or listening tasks (approx. 5 minutes), ILIAS tests (max. 3 hours)

C Examination prerequisites can be: selection of a maximum of three individual preliminary achievements: e.g. work- and study-related documents (approx. 500-600 words), oral tasks (e.g. conversations, meetings, presentations, approx. 15-20 minutes), reading of subject-related literature (variation of the scope according to the task: detailed reading approx. 3-4 pages, global reading approx. 15 pages), case study. The exact examination requirements will be announced by the teacher in the second week of the semester at the latest.

Appendix 1: Examination and Study Plan (Double-Degree-Program)

Start of studies in the winter semester

Sem.	LP	3	6	9	12	15	18	21	24	27	30	33	36
1	Module	Mandatory stay at the University of Gent (Belgium) or Galați (Romania), cf. Annex 2 consortium agreement EMship											
2	Module												
3	Module	Team Project		Obligatory elective subjects EMship									
4	Module	Master Thesis Sustainable Maritime Engineering											

Compulsory modules

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ ungraded
			Prerequisites	Type/Duration/Scope				
Design of Offshore Systems	1552430	V/2; UE/2	Report or Assignment (ca. 15 Pages)	K (150 min) or mP (30 min)	6	Winter semester	3	graded

Appendix 1: Examination and Study Plan (Double-Degree-Program)

Obligatory elective subjects EMship

In compliance with § 5 para. 5, modules amounting to 24 credit points from the following catalogue must be taken.

Module	Module number	Teaching Method/SWS	Assessment		LP	Semester	RPT	graded/ ungraded
			Prerequisites	Type/Duration/Scope				
Large Engines, Energy Converters and Fuels for Climate Neutral Marine Applications	1552510	V/2; P/2	none	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Mathematical Models in Ship Theory	1552520	V/2; UE/2	1 Assignments	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Ocean Research Technologies	1552580	V/2; UE/2	Lab report (ca. 15 Pages) or Presentation (20 min)	K (150 min) or mP (30 min)	6	Winter semester	3	graded
Safety of Maritime Systems	1552650	V/2; UE/2	1 Assignments	K (90 min) or mP (30 min)	6	Winter semester	3	graded
Selected Topics for the Analysis of Marine Structures	1552680	V/2; UE/2	3 Assignments	K (180 min) or mP (30 min)	6	Winter semester	3	graded
Ship Life Cycle Digitalization	1552700	V/2; UE/2	1 Assignments or Presentation (ca. 20 min)	K (90 min) or mP (30 min)	6	Winter semester	3	graded