

## APPLICATION

### Study field "Seafaring" for assessment

Study field	<i>Seafaring</i>
Title of the higher education institution	<i>Novikontas Jūras koledža</i>
Registration code	<i>3347800727 - vecais reģistrācijas kods, 3397800727 - jaunais reģistrācijas kods</i>
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# **Self-evaluation report**

Study field "Seafaring"

Novikontas Maritime College

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# 1. Information on the Higher Education Institution/College

## 1.1. Basic information on the higher education institution/ college and its strategic development fields,.

**Novikontas Maritime College** (hereinafter - NMC) was established on May 27, 2010. Initially, NMC operated only as a Training Centre for Seafarers, providing a wide range of training courses for seafarers of different profiles/ranks. The Training Centre for Seafarers was opened on May 25, 2005. Within five years, NMC became a leader between Training Centres for Seafarers in Latvia due to professional personnel, modern equipment, and the goal-orientation to the efficiency and quality of training.

Today NMC is a modern training institution that offers high-level international education and trainings and prepare experts of Maritime Industry for work at sea.

The main advantage of NMC is that all training programmes are focused not only on theoretical part of programme but on the learning of practical professional knowledge and skills as well.

**The mission of NMC** is to ensure internationally competitive 1st level professional higher education for the Latvian Society and to prepare competitive specialists for the Maritime labour market.

**NMC vision** is to be a modern, innovative and internationally recognized Maritime Education Institution, ensuring for students an effective and a fascinating learning experience.

### NMC study field and study programmes:

Study field	Study programme	Type of study programme
<b>Mechanics and Metal Processing, Heat Power Engineering, Heat Technology, and Mechanical Engineering*</b>	Maritime Transport	First level professional higher education study programme
	Marine Engineer	First level professional higher education study programme

*\* Study field "Seafaring" must be accredited till December 31, 2022.*

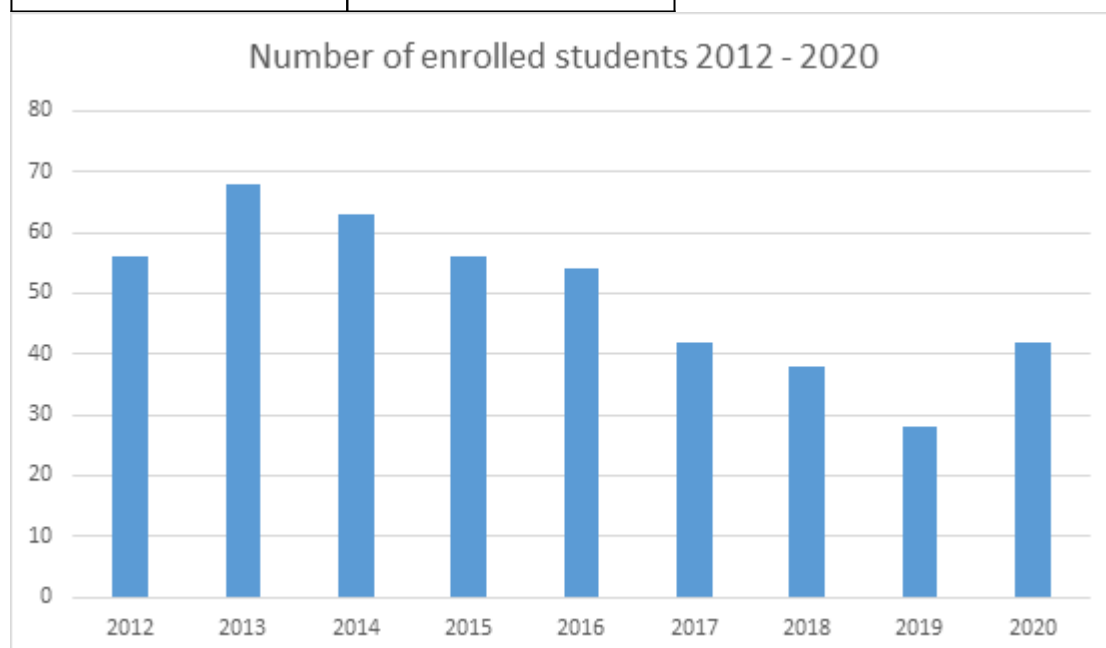
Maritime education programmes have a common international framework: the STCW Convention and Directive 2008/106 / EC, which set out specific requirements for the content of education programmes, quality standards in the educational establishment, implementation aspects and requirements for a national supervisory system and training for seafarers system accreditation at international level. Every five years, the International Maritime Organization (IMO) organizes an independent assessment of the Latvian seafarers' professional training and certification system, based on the results of which Latvian seafarers' professional qualification documents are recognized internationally. At the same time, the European Maritime Safety Agency (EMSA) conducts an audit of the Latvian seafarers' training and certification system every five years to assess the system's compliance with the requirements of Directive 2008/106 / EC. In this regard, the allocation and accreditation of maritime programmes in the field of study "Seafaring" will ensure an objective and unified approach to the implementation and evaluation of maritime

programs at both national and international levels. Both "Maritime Transport" and "Marine Engineer" study programmes are directed for evaluation and accreditation in the study direction "Seafaring".

NMC offers to obtain study programmes that meet demand of the Global labour market. The shortage of STCW certified officers is one of the main problems of the Maritime labour market. While the number of Ship's officers in worldwide is steadily increasing, demand for seafarers has outpaced supply

**Dynamics of the number of students enrolled during the reporting period from January 1, 2012 to December 31, 2020:**

Year	Number of enrolled students
2013./2014.	106
2014./2015.	53
2015./2016.	69
2016./2017.	47
2017./2018.	44
2018./2019.	33
2019./2020.	30
2020./2021.	38



**Dynamics of the number of NMC students during the reference period 2018-2020:**

2018	2019	2020
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Study programme	Number of students	Study programme	Number of students	Study programme	Number of students
Maritime Transport	186	Maritime Transport	177	Maritime Transport	184
Marine Engineer	79	Marine Engineer	57	Marine Engineer	69
<b>Kopā:</b>	265	<b>Kopā:</b>	234	<b>Kopā:</b>	253

### Prime NMC development objectives:

According to the NMC Strategy for the period 2021 – 2027, College has introduced **4 prime objectives**:

1. Qualitative studies and research;
2. Excellent communication and partnership;
3. Integration of technology and pedagogy development tendencies in the study environment;
4. Globalization.

### NMC intends to implement the following priority tasks in the next 6 years in order to achieve the desired results:

- Improvement of study courses and implementation of the annual internal audit;
- Regular review of the study process management (*Key Performance Indicator*) and study content self-assessment;
- Improvement of material and technical base;
- Promoting the professional and pedagogical excellence of teachers;
- Ensure support and relevant infrastructure for scientific activities;
- Ensure fast and efficient communication with students, NMC staff and industry specialists (employers);
- Actively monitor the situation in the maritime and pedagogical fields and expected changes.

NMC Strategy:

<https://novikontas.lv/college/en/oficial-documents/>

### 1.2. Description of the management structure of the higher education institution/ college, the main institutions involved in the decision-making process, their composition (percentage depending on the position, for instance, the academic staff, administrative staff members, students), and the powers of these institutions.

The management structure of NMC is established to ensure the continued implementation of College vision, mission and development strategy.

The representative, governing and decision-making bodies of the College in matters of studies and

research are the College Council (hereinafter - the Council) and the Head of the College (hereinafter - the Director). The Council is the collegial governing and decision-making body of the College's personnel. The Director is College's senior official, who performs the general administrative and economic management of the College and represents the College without special authority. The College highest governing and decision-making body in the strategic, financial and economic fields is the Founder.

College Founder is limited liability company "*JŪRININKŲ TRENIRUOČIŲ CENTRAS*" (hereinafter - the Founder), registered on February 23, 2001 in the Lithuanian register of legal persons with registration number 141980356. Legal address of the Founder - Taikos pr. 81A, Klaipėda, LT-94114, Lithuania.

The Council consists of 12 council members:

- Director (8% of members);
- Deputy Director (8% of members);
- Four representatives of the academic staff (persons elected to academic positions; 33% of the members);
- Two representatives of the general staff (17% of members);
- Two representatives of the Student Council (17% of members);
- Two authorized representatives of employers or professional organizations (17% of members).

NMC Council has established responsibilities and power of attorney in accordance with the Law on Higher Education Institutions and Novikontas Maritime College Regulations:

#### **The Council:**

- approves College's long-term and medium-term performance Strategy;
- approves study programs and changes in them and prepares proposals regarding the implementation of new study programs;
- approves research fields/directions;
- prepares proposals regarding the admission of students and approves the Admission Regulations drawn up by the Commission established by the Council;
- decides on the establishment, reorganization and liquidation of the structural units of the NMC and approve their regulations;
- approves the regulations on academic and administrative positions in the NMC and the procedure for election to these positions;
- elects NNC academic staff and Heads of departments/Study Programme Director;
- approves the regulations on the procedure of studies and examinations in NMC;
- approves internal regulatory enactments of NMC;
- consider and adopt the annual report on the performance of NMC;
- supports and promotes the activities of Student self-government, as well as approves the Regulations of Student self-government;
- draws up the Regulations of the Council;
- draws up the NMC Regulations and amendments to Regulations;
- raises the question of changing the name or legal status of NMC;
- examines other important issues under the Council.

#### **Administrative staff:**

- ensures and promotes the implementation of study programmes;

- adheres to ethical standards;
- is responsible for their resolutions and outcomes of decisions;
- complies with current Legislative Actions, NMC Regulations, resolutions adopted by the Council and ordinance adopted by the Director;
- guarantees and respects the rights of academic staff;
- guarantees and respects the rights of students.

#### **General staff:**

- is responsible for enhancing and promoting operations of NMC, to support openness and transparency in the administration;
- has rights to participate in drawing up the internal regulatory enactments and management and self-government resolutions;
- has rights to participate in drawing up resolutions on the staff questions;
- participates in the meetings of the collegial governing bodies of the NMC;
- submits proposals about the operation of the NMC, shares with opinion regarding staff issues.

#### **Academic staff:**

- is responsible for implementation of Study Programmes and creative learning process;
- constantly develops qualifications, are engaged in the Scientific research;
- adheres to ethical standards;
- is responsible for work duties fulfilment and its outcomes;
- guarantees and respects the rights of students.

#### **Representatives of student self-government and employers:**

- represent their interests with the aim of improving and developing the field of study "Seafaring" in accordance with the basic principles of the Council Regulations.

Responsibilities and powers are described in detail in the Regulations of the Council, other regulations of the NMC, as well as the description of the powers of the academic staff is described in the documents of the Study Programmes` implementation.

### **1.3. Description of the mechanism for the implementation of the quality policy and the procedures for the assurance of the quality of higher education. Description of the stakeholders involved in the development and improvement of the quality assurance system and their role in these processes.**

NMC was established in 2010 to provide Higher Education Study Programmes in accordance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978 (hereinafter - STCW Convention) and the relevant International Maritime Organization (IMO) model courses and and the Regulations on Higher Education in Latvia, the Regulations of the Cabinet of Ministers, and the Maritime legislation, as well as the requirements of shipowners.

The Quality policy and the Quality Management System of NMC (hereinafter - QMS) were developed and implemented in accordance with the Regulation I/8 "Quality Standards" of the STCW Convention, the Article 10 of EU Directive 2008/106 / EC, the International Standard ISO-9001 "Quality Management Systems - Requirements" and the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).



NMC QMS is being regularly reviewed and developed in order to quickly and efficiently implement the requirements and amendments to the ISO and ESG standards and other regulatory enactments.

The main objective of NMC QMS and Quality policy is to enhance the efficiency and quality of College`s operational functions and the level of satisfaction of all interested parties.

The QMS documentation was drawn up to implement the operational functions of the College more efficiently, following documents make the QMS documentation: the College's Quality, the Quality Manual, the documented regulations and protocols required by ISO-9001, and other documents required by the NMC, including the regulations and protocols required to ensure effective QMS planning, operation and process.

The Council, the QMS specialist, the persons responsible for the implementation of the Study Field, the Academic staff and the students are involved in the development and improvement of the Quality Assurance System.

The rules, regulations, procedures are approved by the Council. The QMS specialist develops and validates the procedures. The Directors of the Study Programmes, the Head of the Study Department, the academic staff and the students participate in the improvement of the QMS by providing their proposals and ideas.

NMC Quality policy is available in the annex and on the NMC website.

Link:

<https://novikontas.lv/college/en/oficial-documents/>

**1.4. Fill in the table on the compliance of the internal quality assurance system of the higher education institution/ college with the provisions of Section 5, Paragraph 2(1) of the Law on Higher Education Institutions by providing a justification for the given statement. In addition, it is also possible to refer to the respective chapter of the Self-Assessment Report, where the provided information serves as justification.**

1.	The higher education institution/ college has established a policy and procedures for assuring the quality of higher education.	NMC has developed a Quality Policy and Quality Management System, as well as a college strategy, a development plan for the study field and other internal regulatory enactments and regulations (List of the governing regulatory enactments and regulations are available in Part I, Chapter 1, sub-paragraph 1.2.). In accordance with the NMC procedures, NMC is performing constantly the analysis of the college's activities and processes, the performance indicators and survey results, a self-assessment of the study field is performed every year, as well as a study process management review at the beginning of the year.
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2.	A mechanism for the creation and internal approval of the study programmes of the higher education institution/ college, as well as the supervision of their performance and periodic inspection thereof, has been developed.	Justification is available in Part II, Chapter 2, subparagraph 2.2.2.
3.	The criteria, conditions, and procedures for the evaluation of students' results, which enable reassurance of the achievement of the intended learning outcomes, have been developed and made public.	Justification is available in Part II, Chapter 1, subparagraph 2.1.5.
4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	Justification is available in Part II, Chapter 3, subparagraph 2.3.6.
5.	The higher education institution/ college ensures the collection and analysis of the information on the study achievements of the students, employment of the graduates, satisfaction of the students with the study programme, efficiency of the work of the academic staff, the study funds available, and the disbursements thereof, as well as the key performance indicators of the higher education institution/ college.	Justification is available in Part II, Chapter 2, subparagraph 2.2.4.
6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	Justification is available in Part II, Chapter 2, subparagraph 2.2.1.

## 2.1. Management of the Study Field

**2.1.1. Aims of the study field and their compliance with the scope of activities of the higher education institution/ college, the strategic development fields, as well as the development needs of the society and the national economy. The assessment of the interrelation of the study field and the study programmes included in it.**

An objection of Study Field "Seafaring" is to prepare competitive, qualified and responsible professionals, who are able to successfully enter the labor market and are oriented towards further education, in the Maritime industry with the first level professional higher education that meets the requirements of section A-II/1 and eased requirements of section A-II/2 of the STCW Code or the requirements of section A-III/1 and eased requirements of section A-III/2 of the STCW Code (requirements depends on Programme).

The objection of Study Field "Seafaring" fully complies with the objections of the NMC Strategy for the period 2021 – 2027, as well as with mission and vision of the Collge, which were defined taking into account the needs of society, employers and for economic development.

The Development Plan of the Study Field "Seafaring" was drawn up according to the NMC facilities for its improvement and includes the following issues:

**Increasing the number of students:**

- to promote the benefits of first-level professional higher education;
- to motivate secondary school pupil to choose a maritime profession and studies at NMC;
- to communicate with potential clients by organizing Open days at NMC;
- to work/communicate with students, encouraging them to pass examinations that the number of graduates will be at least 2/3 of the number of matriculated students.

**Improvement of the study program:**

- to carry out regular surveys of employers and graduates on the usefulness of the knowledge acquired in the program;
- to regularly review study course programmes;
- to make changes and improve the Practice programmes and tasks after receiving students' results after defending the Practice and receiving results of the survey from companies/employers;
- to develop and publish methodological materials for study courses;
- to continue working on the improvement of the quality assurance mechanisms of the study process;
- to carry out surveys of employers and graduates on the quality and improvement of the study process.

**Development of the academic staff:**

- to promote the renewal of the academic staff of the Study Programmes, to attract practitioners to study special courses or separate topics;
- to promote the development of the pedagogical knowledge and skills of the academic staff in scientific and practical conferences, seminars and courses;
- to promote and support the studies of lecturers in master's and doctoral studies;
- to promote the mobility of academic and administrative staff and to engage them in Latvian and international projects;
- to engage academic staff into researches;
- to organize research conferences for students;
- to invite guest lecturers from foreign universities and Latvian professionals from industry to present/study certain topics.

**Improvement of material and technical provisions:**

- to regularly update the informative base for the organization of the study process;

- to regularly purchase the latest study literature for the implementation of the Study Programme;
- to improve handouts, to improve other teaching materials;

#### **Development of stable cooperation with external organizations:**

- to expand scientific and methodological cooperation with Latvian and foreign Colleges and Universities;
- to continue and improve co-operation with employers and employers' organizations;
- to analyze regularly the results of co-operation, to update the directions of co-operation;
- to carry out an annual evaluation of the Program and an analysis of the study process.

**2.1.2. SWOT analysis of the study field with regard to the set aims by providing explanations on how the higher education institution/ college expects to eliminate/ improve weaknesses, prevent threats, and avail themselves of the given opportunities, etc. The assessment of the plan for the development of the study field for the next six years and the procedure of the elaboration thereof. In case there is no development plan elaborated or the aims/ objectives are set for a shorter period of time, information on the elaboration of the plan for the development of the study field for the next assessment period shall be provided.**

The SWOT analysis of the Study Field was performed on the basis of the SWOT analysis of the study environment and study process included in the NMC Strategy.

The SWOT analysis of the Study Field "Seafaring":

<b>Strengths</b>	<b>Weaknesses</b>
<ol style="list-style-type: none"> <li>1. Developed infrastructure, modern modern and one of the best learning complexes in Europe;</li> <li>2. Effective communication and active cooperation with employers and industry specialists;</li> <li>3. Management of study courses using the digital study system NOVIS;</li> <li>4. Effective and democratic communication between the NMC administration, students and academic staff;</li> <li>5. NJK provides work-based learning in accordance with the principles of student-centered education;</li> <li>6. Experienced and professional academic staff;</li> <li>7. All NJK students are already employed during their studies;</li> <li>8. More than 95% of all NJK graduates continue to work in the maritime industry.</li> </ol>	<ol style="list-style-type: none"> <li>1. Graduates` feedbacks are not always fast and efficient;</li> <li>2. Insufficiently developed mechanisms for engagement students and academic staff into research;</li> <li>3. Loaded with work academic staff;</li> <li>4. Due to the different preparation level of students, part of students has lackof motivation;</li> </ol>

Opportunities	Threats
<ol style="list-style-type: none"> <li>1. To use and actualize mobility opportunities;</li> <li>2. Continuous improvement of the content and digitization processes of study courses;</li> <li>3. Development of a new and wider range of cooperation with businesses and professional organizations;</li> <li>4. Continuous improvement and renewal of the material and technical base;</li> <li>5. To engage students and academic staff in research, as well as providing resources;</li> <li>6. Opportunity to continue to implement high-quality studies for future seafarers, as well as to offer and provide competence updating training courses for officers already working in accordance with the regulatory enactments of the industry;</li> <li>7. Expanding cooperation with foreign maritime universities.</li> </ol>	<ol style="list-style-type: none"> <li>1. Insufficient level of knowledge of secondary education graduates, especially in STEM subject;</li> <li>2. Demographic situation in the country, emigration;</li> <li>3. Due to the specifics of the qualification requirements, students sometimes are at sea practice longer than 6 months, which can make difficult to achieve desired results in the students' research activities;</li> <li>4. Circumstances of force majeure may significantly affect the implementation of the field of study, especially the organization of sea practice, making it difficult to get to and from the ship.</li> </ol>

The development plan of the Study Field "Seafaring" for 2021-2027, as well as the action plan to reduce the weaknesses and avoid threats are attached in one file, in the annex.

The development plan of the Study Field "Seafaring" for 2021 - 2027 was developed using the knowledge gained by organizing the study process in the previous six years (previous development period). Although in the previous development period the studies took place under the Study Field "Mechanics and Metal Processing, Heat Power Engineering, Heat Technology, and Mechanical Engineering" the goals of the study programmes remain unchanged, to prepare professional ship mechanics and navigators. In order to develop the development plan, a working group was formed, which consisted of the directors of the study programmes, the head of the study department, the head of the quality system, the representative of the teaching staff, the representative of the students, as well as the representatives of the employers. The main emphasis in the development plan was on successful communication with key stakeholders - employers and students.

In the previous period, the strengths and weaknesses of the studies, as well as opportunities and threats were observed and this knowledge was used in developing the development plan of the Study Field "Seafaring". The primary goal for the successful development of the study field was to set and coordinate goals with the management:

- Increasing the number of students;
- Improvement of study programs;
- Qualitative improvement of the academic staff;
- Improvement of technical and methodological provision of study materials.

These goals were carefully developed to determine what would be necessary for all stakeholders, as well as which field of study would be sustainable and would contribute to the development of Latvian maritime affairs not only in the short-term, but also in the long-term.

### **2.1.3. The structure of the management of the study field and the relevant study programmes, and the analysis and assessment of the efficiency thereof, including the**

**assessment of the role of the head of the study field and the heads of the study programmes, their responsibilities, and the cooperation with other heads of the study programmes, as well as the assessment of the support by the administrative and technical staff of the higher education institution/ college provided within the study field.**

NMC implements one study field and two study programmes. The Directors of the Study Programmes (there is one director for each programme) and the Head of the Study Department are responsible for the implementation of the Study Field. All resolutions about what to change in the field of study / study programmes are approved by the Council, which consists of the director, deputy director, academic, administrative, general staff, representatives of employers and students' self-government. All financial resolutions are made by the Founder.

The management structure of the Study Field and two Study Programmes is not complicated and is transparent.

The management structure of the study field and study programmes is analyzed through various tools:

- Internal audits
- Annual Management Review
- Self-assessments,
- Student and Staff Surveys.

The structure is analyzed annually by external experts (DNV and the Register of Seamen). The results of the audits were evaluated in the audit reports. For all deficiencies and suggestions for improvement, a responsible person is appointed to address the non-conformities and implement opportunities for improvement.

Based on the results of internal and external audits, it can be concluded that the management structure of study programs is efficient and transparent.

In accordance with the QMS, all changes and audits are recorded in specially developed forms, the protocols and resolutions of the Council are kept by the Head of the Study Department, thus there is documentation in which it is possible to view all actions taken to improve the Study Field and Study Programmes.

The powers of the Council have been described before in Part I, and within the management structure of the Study Field, the functions of the Council remain unchanged.

Basic functions of Study Programmes directors in the implementation of the Study Field and Programme:

- to perform audits of study courses;
- to make changes/improvements in the Study Programme / study courses, if the normative acts are amended in connection with the Maritime sector or the content is outdated, it is no longer relevant;
- to support students, to provide consultations on the course of study processes;
- to communicate with students and conducting a survey on the content of study courses, technical support, availability of materials, as well as on satisfaction with the teaching style of the lecturer;
- communication with the academic staff about the implementation of study courses, about the results of students, about the need to improve material and technical bases;
- to attract graduates to teach/study training courses for working seafarers.

Basic functions of the Head of the Study Department in the implementation of the Study Field and Programme:

- study course schedule planning;
- communication with the academic staff about the organization of study courses, about the tools used, etc.
- communication with secondary school graduates, students and NMC graduates - about study opportunities, study process, preparation of transcripts, sending out graduates' surveys, etc.;
- to support students in any issue related to college studies;
- records management;
- involvement and participation in events (SKOLA, ENKURS, Ēnu diena, etc.).

Both the Directors of the Study Programmes and the Head of the Study Department cooperate with the administrative staff, which determines the development plans of the study field, as well as with the technical staff, which is responsible for ensuring comfort in the College classrooms.

The Directors of the Study Programmes continuously cooperate, providing for the students of both programmes equal conditions for the professional development, as well as the same resources for studies and research.

The Directors of the Study Programmes in cooperation with the Head of the Study Department ensure the continuous development of the Study Field and the transparent communication with between the administrative, academic, technical staff and students.

**2.1.4. Description and assessment of the requirements and the system for the admission of students by specifying, inter alia, the regulatory framework of the admission procedures and requirements. The assessment of options for the students to have their study period, professional experience, and the previously acquired formal and non-formal education recognised within the study field by providing specific examples of the application of these procedures.**

The requirements for the admission of students and the description of the process are specified in the NMC Admission Requirements, which have been developed in accordance with the Law on Higher Education Institutions and the Regulations of Cabinet of Ministers No. 846 "Regulations Regarding the Requirements, Criteria and Procedures for Admission to Study Programmes", the Regulations of Cabinet of Ministers No. 895 "Regulations Regarding Certification of Seafarers", and taking into account the recommendations of the STCW Convention.

The NJK Admission Requirements are approved by the Council every year by November 1 and are published on the NMC website.

Every citizen of Latvia and persons who have a non-citizen's passport issued by the Republic of Latvia, as well as persons who have been issued permanent residence permits in the Republic of Latvia have the rights to study at the College. The rights of foreigners, who have not been issued a permanent residence permit, to study at the College is determined by Section 83 of the Law on Higher Education Institutions, as well as persons, regardless of their gender, social and other statuses, race and nationality, political opinions and religious beliefs, occupation and residence, have the rights to study at the NMC if persons meet the requirements for admission.

Admission to the college is year-round without additional entrance examinations, taking into

account the applicant's final marks in certain subjects in the secondary education document, the applicant's professional experience and the result of the Marlins (maritime English) test, which must be more than 60%. Professional experience and the Marlins test must be provided by part-time studies applicants.

Persons with secondary education and compulsory work experience in the maritime field for at least 12 months (the requirement for a 12-month seagoing experience does not apply to maritime vocational school graduates) can be admitted to NMC's first-level professional higher education part-time programmes. The NJK Admissions Committee examines each case individually, as well as if the applicant has a certificate of competency not specified in the admission regulations and if the applicant does not have a sufficient sea experience but has a sufficient degree (for example, higher education received in another higher education institution) NMC has the right to request approval from the Maritime Administration of Latvia. To the the full-time programmes NMC will admit persons with secondary education and evidence to prove English language proficiency at least at B2 level (State Exam result or IELTS), work experience in the maritime sector is not mandatory.

Persons, who have completed their previous education abroad and who want to study at NMC, must prove proficiency in English at least at B2 level, unless the person has obtained other higher education in English, and a foreign applicant must submit diplomas for diploma recognition in order to continue education in Latvia.

NJK provides to applicants consultations on career opportunities in the maritime sector before applying for studies. Applying for now is only available in College, in person arriving with documents on the appointed date and time.

NJK Admission Requirements are available here:

<https://novikontas.lv/college/en/oficial-documents/>

Recognition of the study results, professional experience, previous formal and non-formal education is a simple and quick procedure. Recognition is being implemented in accordance with NMC Regulations on the Procedure for Recognition of Competencies Developed Outside Formal Education or from Professional Experience and Learning Outcomes Achieved in Previous Education.

An applicant or student, who wants to have his / her knowledge, skills and competences acquired outside formal education or professional experience recognized, submits an application to the NMC with documents certifying the knowledge, skills and competences acquired outside formal education or professional experience. NMC has rights to organize interviews or competency assessments on simulators.

An applicant or student, who wants to have his / her previous educational results recognized, must submit an application to the college for recognition and an academic transcript or higher education diploma with appendices.

Recognition of formal education study courses takes place regularly, at least 40-50% of admitted annually submit documents for recognition of study results achieved in previous education; sea practice are less likely to be recognized, practice is only recognized if the applicant / student has submitted a sea practice record book stating that all the competencies required to obtain the qualification have been acquired.

#### **2.1.5. Assessment of the methods and procedures for the evaluation of students' achievements, as well as the principles of their selection and the analysis of the compliance of the evaluation methods and procedures with the aims of the study**



## programmes and the needs of the students.

Assessment of students' achievements is being implemented in accordance with the NMC "Study Regulations", in which one of the sections describes the assessment process, as well as in the study course plans are defined the requirements for obtaining credit points and assessment results. It is already planned that by the end of the 1st semester, the Council will approve the new document "Procedure for the Evaluation of Study Results", in which the evaluation process will be separated from the other processes and will be described in even more detail. The decision to approve the new document was made after hearing the opinions of the academic staff.

The evaluation procedure is available in the NMC digital study facility "Novis", on the home page of each study course. The evaluation procedure is equal for both study programmes.

Study results are evaluated according to two indicators: qualitative and quantitative.

- Ten-point grading system are used for the qualitative assessment (see table below), or for the assessment can be used as well - passed / failed;
- The quantitative indicator is the amount of the study course in credit points (CP).

### Ten-point grading system

<b>Grade</b>	<b>Meaning</b>	<b>Atbilstība programmas apjomam</b>	<b>Comment</b>	<b>Dynamics of achievement</b>
<b>10</b>	with distinction	100%	Argumented, strongly positive attitude; initiative and systematic participation in scientific research and / or practical work	Systematically ascending
<b>9</b>	excellent	≥ 90%	Argumented, strongly positive attitude; participation in scientific research and / or practical work	Systematically ascending
<b>8</b>	very good	≥ 80 %	Argumented, strongly positive attitude; regular acquisition of the program	Systematically ascending
<b>7</b>	good	≥ 70 %	Argumented attitude; regular acquisition of the program	Almost systematically ascending

<b>6</b>	almost good	$\geq 60 \%$	Partially (expressed and) argumented attitude; mainly (mostly) regular study of the programme	Mostly ascending
<b>5</b>	satisfactory	$\geq 50 \%$	Attitude and its argumentation are distinguished; regular learning of the program alternates with irregular	Episodically ascending
<b>4*</b>	almost satisfactory	$\geq 40 \%$	Indifferent, unsubstantiated, dominated by irregular learning of the program	There is a progress
<b>3</b>	unsatisfactory	Only a part of the basic questions (skills) are acquired	Indifferent, unsubstantiated; program acquisition is rare, episodic	No change
<b>2</b>	unsatisfactory	Only a part of basic questions (skills) are acquired	Indifferent, unsubstantiated; the program is not obtained	No change
<b>1</b>	unsatisfactory	Fail	Indifferent, unsubstantiated; the program is not obtained	No change

**\*4 (almost satisfactory) is the LOWEST PASS mark**

During the semester, the lecturer regularly controls the students' knowledge and skills, using the types of tests specified in the detailed programme of the study course: tests, homework, calculations, graphics, reports, laboratory work, tests on stimulators. Tests, and other imid-term works are held during scheduled contact hours. The lecturer has the rights to use other assessment criteria for the assessment of study results during the semester, eg points, percentages, etc., which at the end of the course are converted into a ten-point grading system or passed/not passed. The lecturers must acquaint the students with the evaluation criteria of each course in the first lesson.

The final grade in the course can be cumulative (summarizing the performance of parts of the study course), which means that regular work during the semester affects the final grade in the course. The study course is successfully passed if all the requirements of the study course are met. Proportions of each work and exam / test are automatically programmed in each study course in the "Novis".

In order to assess whether the assessment of the study result is understandable for the students, each study course has a survey on the implementation of the course, and if a low grade is marked in a particular course, the Study Director clarifies with a lecturer what was not precise and clear to make improvements in the assessment system. Academic staff can inform in free form the Study Programmes Directors about the observed deficiencies in the system, as well as academic staff can choose an evaluation structure for their study course, which must be agreed with the Study Programmes Directors.

**2.1.6. Description and assessment of the academic integrity principles, the mechanisms for compliance with these principles, and the way in which the stakeholders are informed. Specify the plagiarism detection tools used by providing examples of the use of these tools and mechanisms.**

NMC operates in accordance with Ethics and academic honesty policy (hereinafter - the Policy).

Since 2018, the NMC has been strengthening its adherence to the principles of academic honesty, which was due to the fact that the academic staff of the college regularly encountered violations in the work of students, as well as to improve the quality of qualification work.

On November 12, 2019, NMC representatives participated in the seminar "Academic Honesty and Ethics in Higher Education", after which the Directors of the NMC Study Programme have discussed with the academic staff the importance of academic honesty in the implementation of the Study Field and Study Programmes. Lecturers and students are informed about the content of the Ethics and academic honesty policy. The Policy is publicly available on the College's website and in the NMC digital study environment "Novis".

All assignments performed by students, as well as qualifying assignments, must be uploaded to Novis prior to defense, this is required to ensure a prompt check for plagiarism.

It is the duty of the academic staff not to hesitate to inform the Directors of Study Programmes about cases of plagiarism with evidence that plagiarism has occurred. NMC uses the common user platform to check the works: <https://my plag.lv>. If plagiarism is detected in a student's work, the grade of the work is 1 (unsatisfactory), after that meetings are organized with the Director of the Study Programme, the lecturer and the student to discuss the essence of the principle of honesty, and then the student has to re-pass the debt.

If the anti-plagiarism tool matches more than 20% of the study courses' works are plagiarism and more than 10% in the qualification works, additional expertise is performed to assess the nature of the match (citations, reference to the law, etc.).

The Directors of the Study Programmes check the materials used by the academic staff for plagiarism at least once a year.

## **2.2. Efficiency of the Internal Quality Assurance System**

**2.2.1. Assessment of the efficiency of the internal quality assurance system within the study field by specifying the measures undertaken to achieve the aims and outcomes of the study programmes and to ensure continuous improvement, development, and efficient performance of the study field and the relevant study programmes.**

NMC operates in accordance with the Novikontas Maritime College Regulations, Strategy 2021-2027, Quality policy, and Ethics and academic honesty policy.

The Novikontas Maritime College Regulations set out the basic directions and tasks of the college.

The NMC Strategy for 2021-2027 defines 4 prime objectives: 1) qualitative studies and research; 2) excellent communication and partnership; 3) Integration of technology and pedagogy development tendencies in the study environment; 4) globalization. The Quality policy and the Ethics and academic honesty policy focus on adherence to the principles of NMC. The Quality Management System of NMC were developed and implemented in accordance with the Regulation I/8 "Quality Standards" of the STCW Convention, the Article 10 of EU Directive 2008/106 / EC, the International Standard ISO-9001 "Quality Management Systems - Requirements" and the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) to ensure that NMC main objectives will be achieved.

The NMC QMS consists of 10 procedures (listed in Part I, Chapter 1, sub-paragraph 1.2.) that govern all operational functions in the College. Since the establishment of the College, QMS procedures have been continuously improved, taking into account the views, complaints and suggestions of the administrative staff, lecturers and students. The system is flexible, which allows to adapt very quickly and efficiently to new regulations, amendments to regulatory enactments and amendments approved by the Council, which affect the implementation of the field of study.

Examples from NMC experience, which is done in order to continuously improve and develop the field of study and which ensures the achievement of the goals and results of the study programs:

- There is a regular review of the management of the study field, which has been carried out in order to reveal shortcomings and eliminate them. The report examines the results of student surveys on the implementation of study courses, analysis of the dynamics of the number of enrolled and graduates;
- Every year the Study field and Study Programmes are evaluated for a self-assessment preparation;
- Internal audits of study courses are performed according to the schedule approved by QMS, the results of which are recorded in the special QMS form. If after the audit it is concluded that the content of the course is outdated, the renewal of the content of the study course is planned;
- An inventory is performed at least once a year (material and technical support report), if deficiencies or non-compliances with the requirements for the implementation of study programs are identified, a procurement plan is made and funding is allocated;
- Evaluation of students 'and lecturers' complaints and proposals (if applied), after evaluation a level: short-term or long-term objective - is assigned to the content of complaints and proposals.

**2.2.2. Analysis and assessment of the system and the procedures for the development and review of the study programmes by providing specific examples of the review of the study programmes, the aims, and regularity, as well as the stakeholders and their responsibilities. If, during the reporting period, new study programmes have been developed within the study field, describe the procedures of their development (including the process of the approval of study programmes).**

The processes of development and review of study programmes are regulated by the NMC QMS procedure "Development, monitoring and regular audits of Study Programmes. The procedure is available in the annex as well as on the NMC website, a link is provided at the end of the 2.2.2. chapter.

The development of a new programme may be initiated by the NJK Director and / or the NJK Deputy Director. Opening of a new study field, if necessary, is approved at the Council meeting, no new study field is opened without the consent of the Council.

Before starting the planning of the development of a new study programme, the Director of the new Study Programme (hereinafter - the responsible person) is appointed, who is responsible for the development process: plans and implements the process. The responsible person determines the number of people in the work group, as well as determines the required resources.

The responsible person develops the study programme, clearly defining the goals, tasks, code, qualification, further education opportunities of the study programme. Before submitting a study programme for licensing, an internal validation is performed, in which at least one Director of another program, NMC QMS specialist, Director and / or Deputy Director participates. If the validation is successful, then a new study programme is sent to the Register of Seamen of Latvia to coordinate the compliance of the programme with the STCW Convention.

Once the development process is complete, the work group prepares an application for licensing and

a self-assessment report in accordance with regulatory enactments and the methodology of the assessment agency and / or guidelines and submit it to the Agency responsible for evaluation.

After the accreditation of the study field "Mechanics and Metal Processing, Heat Power Engineering, Heat Technology, and Mechanical Engineering", and till December, 2021, no new study programmes have been developed.

The content of study programmes is reviewed by the Directors of the Study Programmes. The internal audit takes place once a year. All study courses must be reviewed within 3 years. The Directors of the Study Programs coordinate annually the audit schedule with the QMS specialist till February 1. Deficiencies / inconsistencies in the content of study programmes identified during the audit are noted in a special form, in which the actions taken to eliminate the deficiencies / inconsistencies are then as well noted/recorded. The Directors of the Study Programmes are entitled to make changes in the study programme.

A survey for students on the implementation of study courses is available in each study course in the "Novis". The survey is conducted electronically. Students fill out questionnaires after exams. The results are received by the Study Programmes Directors and the Head of the Study Department. If the study course is evaluated with grades 1-3, which is a low indicator, internal sessions are organized with the participation of the persons responsible for the implementation of the study field.

After each graduation, NMC sends electronic questionnaires for graduated in order to receive an overall assessment of the study programmes. Graduates' comments and evaluations are taken into account in the improvement of study programmes.

Every July, the Head of the Study Department prepares a self-assessment report, which reflects the data from the surveys of students and graduates, as well as information on the implementation of study programmes from the Directors of Study Programmes.

It is already planned that during the 2021/2022 study year the questionnaire of employers about students' sea practices is going to be intensified in the procedures, as well as to include in the questionnaire a form in which employers can leave comments on students' readiness for work at sea and proposals for the improvement of study programmes. It is planned that surveys will be sent to employers twice a year: in June and December.

A review of the management of the study field is carried out on a regular basis, which has been

carried out in order to reveal the shortcomings in the management of the study field and eliminate them. The report examines the results of student surveys on the implementation of study courses, analyzes the dynamics of the number of enrolled and graduates. It is planned that in 2021/2022 study year new surveys on the management of study programmes will be held twice a year (in June and December), namely, the evaluation of the Directors of the Study Programmes and the Head of the Study Department.

Questionnaire and audit of study programmes are two mechanical methods used by NMC to analyze the content of study programmes and improve it.

Link:

<https://novikontas.lv/college/en/oficial-documents/>

**2.2.3. Description of the procedures and/or systems according to which the students are expected to submit complaints and proposals (except for the surveys to be conducted among the students). Specify whether and how the students have access to the information on the possibilities to submit complaints and proposals and how the outcomes of the examination of the complaints and proposals and the improvements of the study field and the relevant study programmes are communicated by providing the respective examples.**

The procedure for submitting student complaints and proposals is defined in the NMC "Procedure for submission and review of students' proposals and complaints;", which determines how students can submit proposals or complaints to the NMC management regarding the implementation of the study process and working hours.

Proposals or complaints can be submitted individually or by groups of students (including students' self-government), regardless of the study programme or form of study. Proposals and complaints must be submitted in writing form in person to the Head of the Study Department, but it is planned that during 2021/2022 study year, the procedure is revised and electronic submission of complaints and proposals is introduced.

Proposals should be submitted to the NJK management on the following issues:

- On the content and quality of studies - to Deputy Director of NMC;
- About the academic calendar - to the Director of the Study Programme;
- On the documents regulating the studies and organizational issues - to the Head of the NMC Study Department.

Proposals must be submitted to the Director of the Study Programme:

- About the study organization in the departments;
- On the improvement of the quality of the study programme.

Proposals are considered by the appropriate officials. Replies to applicants shall be provided within 15 working days or within 30 working days if the relevant officials need further consultation, notifying the applicants. The results of the examination of the proposals and the improvements that were made shall be announced in write form.

Complaints may be filed regarding violation of the agenda of NJK staff (observance of internal rules and work norms, non-fulfillment and incomplete fulfillment of work duties, intentional or

unintentional non-fulfillment of orders of the employer and supervisor), non-observance of working hours and non-compliance with study documents when the specific facts mentioned in the complaint have directly affected the student's study process or restricted the rights.

Complaints may be submitted no later than 15 working days after the finding of irregularities. The complaint must be dealt with within 15 working days and a written response must be provided to the person who has submitted the complaint.

During the study 2020/2021 year, 2 meetings were held with the participation of Study Programme Directors and students. The appointment planning mechanism between the Study Directors and the QMS specialist is currently being coordinated because taking into account the specifics of the maritime industry and the fact that students study also part-time and continue to work on ships at sea, meetings have to be organized more than twice a year. Meetings in the 2020/2021 study year were appreciated as a successful experience to get feedback from students. The Head of the Study Department also records the proposals and complaints heard during the providing services for the students and informs the management about proposals and complaints.

Procedure for submission and review of students' proposals and complaints is available in "Novis".

Among the examples, one of the complaints related to the problem of communication between the lecturer and the student can be mentioned. The lecturer did not check the students' work for a long time (1.5 months). The Student has notified the Head of the Study Department about this case. The Head of the Study Department confirmed to the student that the complaint had been received and forwarded to the Director of the Study Programme. The Director of the Study Programme immediately clarified the situation with the lecturer and informed the students in write form that the problem was with the "Novis", the lecturer did not see any new work, and that within 3 working days the technical problem will be resolved. When the technical problem was solved, the Head of the Study Department informed the student by phone that the lecturer saw the works and checked them. In NMC's experience, no proposals have yet been submitted on the content of study programmes, but proposals on free coffee machines on each floor have been submitted, respectively NMC management evaluated this proposal and currently there are coffee and water machines on every floor of the college and in the college swimming pool building.

**2.2.4. Provide information on the mechanism for collecting the statistical data, as developed by the higher education institution/ college. Specify the type of data to be collected, the regularity of collection, and the way the information is used to improve the study field. Describe the mechanism for obtaining and providing feedback, including with regard to the work with the students, graduates, and employers.**

NMC conducts annual management reviews of the field of study, summarizing the performance indicators of NMC management, operational functions and support processes.

Approving the development plan of the study field, it was decided that starting from 2021/2022 study year 2nd semester, regular questionnaires and collection of the following data will be started:

- Number of students in the study programme (as well as distribution by age, gender, number of foreign students);
- Number of students on the academic leave;
- Number of student mobilities;

- Number of graduates of the study programme;
- Number of ex-matriculated students of the study program without issuing a diploma;
- Results of the state final examination;
- Student satisfaction - survey results;
- Students' evaluation for each study course - survey results;
- Staff satisfaction - survey results;
- Number of staff mobility;
- Employers' opinion about the study programmes, the content of the study programme and the level of preparation of trainees - survey results;
- Financial report.

The mechanisms for obtaining and providing feedback working with students are as follows:

1. Students fill in surveys on the quality of study course implementation after passing the exam/test. Surveys are available in the "Novis" in each course. The directors of the Study Programmes evaluate the obtained results not less than once per semester. In case a complaint about the academic staff is received, the results of the survey can be analyzed more than once per semester if the director of the Study Programme considers that the results of the survey can help to objectively assess the situation. The directors of the Study Programmes value the survey's results, students' recommendations and comments about the study courses. If recommendations and comments are useful and the suggestions comply with the objectives and tasks of the course and do not conflict with the requirements of the STCW Convention, the Director of Study Programmes shall decide on the implementation of the recommendations into the study process accordingly. In case of receiving negative comments and evaluations about the work of teaching staff, additional situation assessments and discussions with lecturers are conducted to understand why negative evaluations have been received and how the College can help and influence the situation to prevent conflicts between teaching staff and students.

2. Management of the Study Field starting from the 2nd semester of the 2021/2022 study year implements a survey on student satisfaction with college staff (including academic, technical and administrative staff). The questionnaire will be sent to students by e-mail at least once per year. A summary of the results will help NMC Management of the Study Field to identify strengths and weaknesses in communication with students in order to continue to develop strengths and to improve weaknesses.

3. In order to track and evaluate the progress of student mobility, the ERASMUS + project coordinator reviews reports once per quarter, which are sent automatically from the common project system to each student at the end of the mobility. The received reports help the College management to define goals for the development of the ERASMUS + project.

Working with graduates and tracking graduates is a challenging process for the College. Taking into account the specifics of the industry that graduates can be at sea 1 or more times per year, it is difficult to get feedback after graduation. NJK actively participates in seminars and projects on strengthening the graduate monitoring system. Starting from the 2nd semester of the 2021/ 2022 study year, the mechanism with regards the work with graduates is changed. As it was done before graduates are going to receive a survey immediately after graduation to evaluate the implementation of the Study Programme, but during graduation ceremony it will be explained to graduates how important it is for the College that graduates continue to provide feedback on their employment status and the industry in which they are employed. It was already mentioned above that NMC graduates who choose to pursue a career at sea can be on board at least once per year, therefore in order to obtain data from graduates as efficiently as possible, it is decided to send a small survey every 2 years after graduation to monitor employment status of graduates and



maintain contact with them.

Communication with graduates is very important for NMC in order to find out the latest changes in the industry that NMC graduates face at work and to be able to follow the changes in the maritime sphere.

Employers were previously surveyed once a year. Starting from the 2nd semester of the 2021/ 2022 study year the survey of employers and data collection will take place twice per year: surveys will take place in June and December, data collection - in July and January. A questionnaire on employers' satisfaction with NMC within the framework of cooperation is going to be sent in December, and a survey on the level of professional readiness of NMC students (trainees) is going to be sent in June. All the provided recommendations are evaluated and if they do not contradict the aims and objectives of the Programmes and the STCW Convention, the NMC Council decides on the implementation of the recommendations into the Study Programmes.

NMC managers maintains regular direct contact with employers' representatives to follow which skills and knowledge are expected by shipowners and crew from prospective officers.

In addition, data are collected at the beginning of October each year, and by October 15 the NMC submits data to the Central Statistical Bureau of Latvia and to the Ministry of Education and Science.

The received survey results are used for the self-assessment of the study field in July and the study field management report in January, as well as the collected statistical data of students / graduates / employers and the results of the survey will be used:

- for the development of the study field and study programmes;
- to improve the material and technical base;
- for the assessment of academic staff and updating of qualifications;
- for the development of the content of study courses and study programmes in accordance with the latest trends in the field;
- if the number of students enrolled in the study program decreases, reasons for decrease will be defined in survey results and the college advertising program will be changed.

**2.2.5. Specify the websites (e.g., the homepage) on which the information on the study field and the relevant study programmes is published (in all languages in which the study programmes are implemented) by indicating the persons responsible for the compliance of the information available on the website with the information published in the official registers (State Education Information System (VIIS), E-platform).**

Information about the study field and the relevant study programmes is published on the NMC homepage

<https://novikontas.lv/college/en/>. Information on the homepage is available in both Latvian and English.

The Marketing Manager is responsible for placing information on the website, administrative staff is responsible for updating the information:

- The Directors of the Study Programmes review and update the information to the relevant study programmes;
- The Erasmus + Coordinator reviews the current information regarding

mobility opportunities, application procedures, Erasmus + documents and other foreign projects;

- The Head of the Study Department reviews the information published on the website in general, updating information if necessary, etc., as well as the Head of the Study Department is responsible for ensuring that the information available on the website corresponds to the information in the official registers.

## **2.3. Resources and Provision of the Study Field**

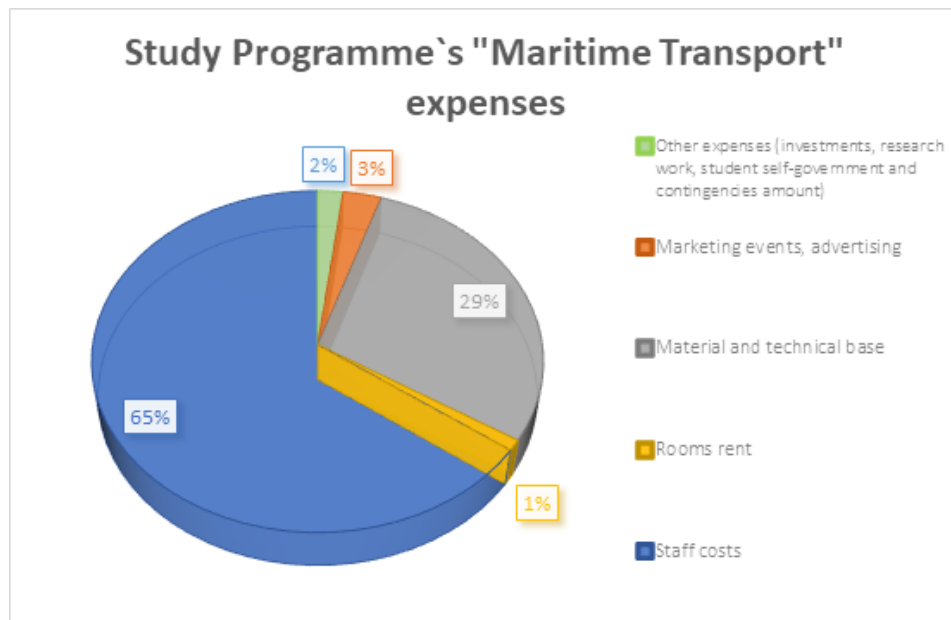
**2.3.1. Provide information on the system developed by the higher education institution/ college for determining and redistribution of the financial resources required for the implementation of the study field and the relevant study programmes. Provide data on the available funding for the scientific research and/or artistic creation activities, its sources and its use for the development of the study field.**

The NMC sources of funding are specified in Article 58 of the NJK Regulations that the college is financed by its founder, observing the minimum costs of the implementation of educational programmes per student set by the Cabinet of Ministers. The highest governing body and decision-making body of the college in strategic, financial and economic matters is the Founder.

Taking into account that "Novikontas Maritime College" is a private college, its main source of funding is income from economic activities, as well as Erasmus + program funding, which supports the mobility of academic and non-academic staff (professional development, participation in scientific conferences, personal development, promotion of cooperation projects). NMC provides funding for science researches through its own resources as well as external funding.

The tuition fee for 1 study year for students is approved by the ordinance of the College Director or Deputy Director every year until January 15. The student can pay splitting the payment (the maximum tuition fee can be divided into three parts) or for the entire study year in accordance with the study agreement. If a student pays for the entire study programme in one payment at the beginning of the studies, then they are not subject to inflation, etc. tuition fee changes. The tuition fee includes all the necessary study materials and all the necessary courses in order to receive a seafarers' certificate of competence in the Register of Seamen of Latvian.

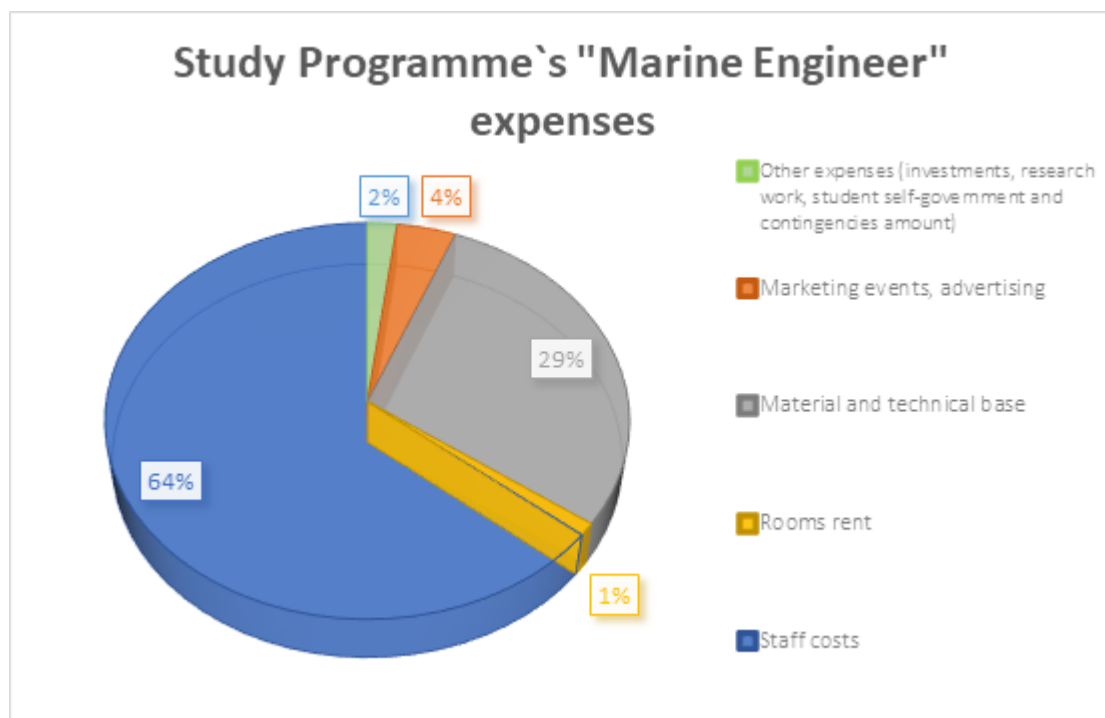
The costs of NMC programs mainly consist of staff costs and material and technical base expenses. Ensuring an increase in the number of students is one of the parts of NMC's strategy for quality studies, therefore the set of marketing and sales expenses is considered to be appropriate. Other expenses includes research, investment, student self-government and contingency amount.



Below is a detailed description of the expenses for the study programme "Maritime Transport":

Expenses		
	EUR	Izdevumi %
<b>1. Staff costs</b>	3839 €	65,29%
<i>1.1. Administrative staff costs</i>	566 €	9,63%
1.1.1. Salaries of administrative staff	458 €	7,79%
1.1.2. The employer's social tax	108 €	1,84%
<i>1.2. Academic staff costs</i>	3273 €	55,66%
1.2.1. Salaries of administrative staff	2618	44,52%
1.2.2. The employer's social tax	655 €	11,14%
<b>2. Rooms rent</b>	34 €	0,58%
<b>3. Material and technical base</b>	1730 €	29,42%
<i>3.1. Methodical materials</i>	10 €	0,17%

3.2. Materials for practical work	15 €	0,26%
3.3. Diplomas and other document	5 €	0,09%
3.4. Expenses related to the organization of the examination	128 €	2,18%
3.5. Improvement of material and technical base	120 €	2,04%
3.6. Certificates for work at sea	1452 €	24,69%
<b>4. Marketing events, advertising</b>	<b>159 €</b>	<b>2,70%</b>
<b>5. Other expenses (investments, research work, student self-government and contingencies amount)</b>	<b>118 €</b>	<b>2,01%</b>
Total expenses for one student for the whole study programme	<b>5880 €</b>	<b>100,00%</b>



Below is a detailed description of the expenses for the study programme "Marine Engineer":

Expenses	EUR	Izdevumi %
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<b>1. Staff costs</b>	3756 €	63,88%
<i>1.1. Administrative staff costs</i>	566 €	9,63%
1.1.1. Salaries of administrative staff	458 €	7,79%
1.1.2. The employer's social tax	108 €	1,84%
<i>1.2. Academic staff costs</i>	3190 €	54,25%
1.2.1. Salaries of administrative staff	2552 €	43,40%
1.2.2. The employer's social tax	638 €	10,85%
<b>2. Rooms rent</b>	34 €	0,58%
<b>3. Material and technical base</b>	1713 €	29,13%
<i>3.1. Methodical materials</i>	10 €	0,17%
<i>3.2. Materials for practical work</i>	30 €	0,51%
<i>3.3. Diplomas and other document</i>	5 €	0,09%
<i>3.4. Expenses related to the organization of the examination</i>	128 €	2,18%
<i>3.5. Improvement of material and technical base</i>	120 €	2,04%
<i>3.6. Certificates for work at sea</i>	1420 €	24,15%
<b>4. Marketing events, advertising</b>	259 €	4,40%
<b>5. Other expenses (investments, research work, student self-government and contingencies amount)</b>	118 €	2,01%

Total expenses for one student for the whole study programme

**5880 €**

**100,00%**

### Available research funding

As already indicated in the detailed description of "Maritime Transport" and "Marine Engineer" expenses, Novikontas Maritime College provides funding for Research (investment, research work, student self-government and contingencies) in the amount of at least 118 EUR for each student who completes the full study cycle, thus paying the full tuition fee. Looking at the number of students, the funding allocated to research is calculated in proportion to the study year in which the student is studying, if the student is studying in the 1st year, then it is 1/3 of the total amount allocated, or  $118/3 = 39.33$  EUR. In the period from the moment when the study field "Mechanics and Metal Processing, Heat Power Engineering, Heat Technology, and Mechanical Engineering" was accredited (18.12.2013.) to February 1, 2022, the funding allocated to research by NMC amounts to:

Study year	Student count	Calculation of finances	Funding for research
1st year	506	$506 \times 39.33$	14788.08 EUR
2nd year	130	$(130-68) \times 78.67$	4877.54 EUR
3rd year	68	$68 \times 118$	8024.00 EUR
Total funding for research on 01.02.2022			<b>27689.62 EUR</b>

### Use of available research funding for the development of the study field and the corresponding programmes.

As the Novikontas Maritime College is a private college and is funded by its founder in accordance with the minimum cost per student per educational programme set by the Cabinet of Ministers. As well as in addition to the study process, the college may provide paid services, perform economic activities and provide other services in accordance with the basic directions of its activities and regulatory enactments. A large part of NMC's income is made up of professional study courses, the proceeds of which are also invested in the development of study programmes. Thus, NMC's investments in research and their use for the development of the study field and the corresponding study programmes far exceed the direct income from the study process and the funding that is planned to be directed to the development of study programmes. The management of NMC invests most of the profit from the professional training courses by improving the material and technical equipment and training base of the college, creating the highest quality maritime training conditions.

In the period between the accreditation and the present (01.02.2022.) NMC has invested its resources in the following projects for the development of study programmes:

Investment to the development of the study programs	Year	Investment amount in EUR	Study programme
Virtual Reality Psychological assessment tool	2021	10000.00	Maritime Transport Marine Engineer
Hydrostation TorC 0,25kw 700bar	2021	4448.00	Marine Engineer

Hydrostatical torque wrench 1-TNSQ3/4 183-1837 Nm	2021	3714.00	Marine Engineer
Hydrostation 1,5kw 4.2cm3,50L,150bar	2021	3101.26	Marine Engineer
Maritime container FCBU8673609	2021	4000.00	Marine Engineer
Maritime container FCBU8673147	2021	4000.00	Marine Engineer
Practical training on water full simulation swimming pool	2020	5000000.00	Maritime Transport Marine Engineer
Navigation simulator ship model NTPro 5000 FAST	2020	1000.00	Maritime Transport Marine Engineer
Navigation simulator NTPro 5000 ship model ASD	2020	1000.00	Maritime Transport
L-3 SAFE CARGO instal serv.	2020	11363.64	Maritime Transport
Avtek Touchscreen 5 Connect86"	2020	9090.00	Maritime Transport Marine Engineer
Navigation simulator NTPro 5000 ship model SHUTTLE TANKER	2020	7500.00	Maritime Transport
Navigation simulator ship model NTPro 5000-BULK CARRIER 21	2019	1000.00	Maritime Transport
Ship Handling with Azimuth Propulsion Training Simulator	2019	96000.00	Maritime Transport
Davit system for Resque boats handling	2019	2479.34	Maritime Transport Marine Engineer
Compressor BAUER PE300-TE	2019	7250.00	Maritime Transport Marine Engineer
VMWare vSphereEssential equipment for webinars, Microsoft	2018	9935.68	Maritime Transport Marine Engineer
Laerdal mannequins - Airway	2018	1800.00	Maritime Transport Marine Engineer
Hydraulic torque wrench	2018	1150.99	Marine Engineer
Power pack max pressure 700bar	2018	1274.61	Marine Engineer
Bolt tensioner/tightener	2018	525.13	Marine Engineer
Wind turbine SIVA 250/50	2018	5500.00	Marine Engineer

Rescue device ROLLGLISS	2018	1420.10	Maritime Transport Marine Engineer
BOAT MP 800 SPRINGER	2017	27278.88	Maritime Transport Marine Engineer
MARITIME CONTAINER 20 (NEW)	2017	4160.00	Maritime Transport Marine Engineer
SIMULATOR FULL MISSION ENGINE ROOM	2016	360000.00	Marine Engineer
WELDING LAB	2015	65644.94	Marine Engineer
OIL WATER SEPARATOR	2015	96000.00	Marine Engineer
HIGH VOLTAGE SIMULATORS	2015	178000.00	Marine Engineer
HVS SIMULATORS	2015	26177.72	Marine Engineer
SERVER 4U INTEL XEON	2015	2883.96	Maritime Transport Marine Engineer

As can be seen in the table above, the real investment in the development of study programmes far exceeds the minimum planned, which indicates that the Novikontas Maritime College has significantly improved the material and technical equipment of the study in recent years and prepared the environment to increase student capacity.

All the technical equipment created and purchased, as well as, for example, the construction of the swimming pool, has been diligently planned and coordinated with the NMC teaching staff. It is for this reason that NMC has been very active in recent years in staff exchange trips to all major European seafarers' educational institutes, where an individual deliverable was developed for each trip, which was further invested in the development of study programmes.

Direct costs for research:

Research	Year	Costs	Study programme
Psychological evaluation using virtual reality for seafarers	2021	19000.00	Maritime Transport Marine Engineer
· Purchase of virtual reality psychological evaluation equipment · Cost of one study in collaboration with CleverPoint Marine x 60 people		· 10000.00 · 150.00 x 60 = 9000.00	Maritime Transport Marine Engineer



Study of dredging works in Liepāja port	2017	15050.00	Maritime Transport Marine Engineer
· Simulator usage costs x 25 days		· 250.00 x 25 = 6250.00	Maritime Transport Marine Engineer
· Teacher costs x 200h x 4 people		· 11.00 x 200 x 4 = 8800.00	

**2.3.2. Provide information on the infrastructure and the material and technical provisions required for the implementation of the study field and the relevant study programmes. Specify whether the required provision is available to the higher education institution/college, available to the students, and the teaching staff.**

Study programs are implemented at Dunties Street 17a and Dunties Street 17d. NJK is located on 2 floors, and next to the college building is the NJK swimming pool building - the only swimming pool building of its kind in the Baltics, as well as one of the most modern maritime rescue simulation swimming pool buildings in Europe. , thunderstorms, lightning and thunderstorms, as well as various preset scenarios with a total area of 1415.19 m<sup>2</sup>

- 212.4 m<sup>2</sup> Safety course simulator room (swimming pool with weather simulation);
- 119.0 m<sup>2</sup> Fire fighting simulator rooms;
- 29.76 m<sup>2</sup> Welding Laboratory;
- 29.76 m<sup>2</sup> OWS laboratory;
- 29.76 m<sup>2</sup> Electrical and Hydraulic Laboratory;
- 34 m<sup>2</sup> High Voltage Laboratory;
- 1009.9 m<sup>2</sup> Dunties Street 17A study rooms.

NMC has in property area of 2879 m<sup>2</sup>.

NMC is equipped with 1 computer classroom, 24 classrooms, 19 laboratories (simulators) with 12 workplaces and 3 administrative rooms. Computers are used for the study process for students' individual and scientific works/projects. All NMC computers are connected to the NMC Intranet network, as well as Internet access is provided in all NMC classrooms.

The study department (the department responsible for the implementation of the study programme) has at its disposal the auditoriums (equipped with the necessary TV, audio, video, computer equipment), as well as the technical equipment that is needed to ensure the study process is implemented according to specialization (TRANSAS ERS 5000 simulators - engine room simulator with 7 Control Room , L3 - liquid cargo simulator, TRANSAS simulators - navigation bridges with Dynamic Positioning module; the rescue boat (3.8 to 8.5 meters long, equipped with an outboard engine and a complete set of oars, complies with the requirements of section V, paragraph 5.1, of the LSA Code) and a boat crane of adequate construction that the boat can be lowered freely; inflatable life-raft in a container with a hydrostatic launcher; life raft and launching crane; life jackets, wetsuits, thermal protection aids for trainees and instructors; 2 - channel VHF portable life-saving appliances; the pyrotechnic kit available in the lifeboat; 406 MHz emergency position indication radio buoy EPIRB (mock-up); 9 GHz search and rescue radar transponder SART (layout); a full set of lifeboat equipment; a full set of life raft equipment; human-sized mannequins

for resuscitation exercises; first aid kit: stretcher, first aid kit, breathing apparatus; Neil-Robertson stretcher, equipped swimming pool for training; quality management system QMS, training process management system TMS, Novikonta database, etc.).

Students have the opportunity to use the "Novis". "Novis" provides an excellent opportunity to retain the information needed to organize effective study courses. From the interactive system (Novis) you can download information no matter where the student is, exchange materials with teachers and receive consultation. "Novis" allows to follow the progress of students' studies, looking at the students' success, their activity in taking study courses, fulfilling independent tasks.

The NMC database provides students with access to study and scientific literature in electronic format in all study courses, which facilitates studies and provides students with easy access to study materials while on board, which is especially relevant for part-time students.

On the basis of cooperation agreements NMC students have the opportunity to use RTU Olaine College's of Technology and Riga Technical College's (RTK) resources for the studies, including the library, as well as NMC is allowed to have practical classes at Freeport of Riga's territory.

NMC students and academic staff can use all the possibilities of NMC infrastructure and material and technical provision.

**2.3.3. Provide information on the system and procedures for the improvement and purchase of the methodological and informative provision. Description and assessment of the availability of the library and the databases to the students (including in digital environment) and their compliance with the needs of the study field by specifying whether the opening times of the library are appropriate for the students, as well as the number/area of the premises, their suitability for individual studies and research work, the services provided by the library, the available literature for the implementation of the study field, the databases available for the students in the respective field, the statistical data on their use, the procedures for the replenishment of the library stock, as well as the procedures and possibilities for the subscription to the databases.**

NMC carried out a research about how and where NMC students' search study materials and how often they use the library, NMC has found that 80% of students study outside the college, therefore it would be impractical and financially unjustifiable to build a library in NMC, because students learn most of the study content by themselves and at work (on-board practice). Thus, NMC has signed a cooperation agreement with RTK that students are allowed to use RTK resources, including the library, to study general education and professional study subjects, but most of the materials required for professional study courses are obtained by students from digital resources, including:

1) "Novis" platform:

- NMC has prepared study materials for all study courses and all topics that fully cover the course material;
- Professional training materials in PDF format on each topic.

2) At workplaces (aboard vessels):

- All technical documentation;
- All necessary maritime literature (mandatory for shipping companies);
- Ship specific documentation.

3) Maritime Administrations of Latvia homepage:

- International law;
- Regional legislation
- EU regulations;
- National legislation;
- Maritime Administration Circulars.

4) Documentation on the International Maritime Organization (IMO) homepage:

- Circular;
- Operating documents;
- Programmes.

5) Books and documentation available at workplace.

NJK teaching materials are placed in the "Novis" system, students can use the materials for the studies, as well as the materials available in "Novis" can be used by students for research work.

**2.3.4. Provide a description and assessment of information and communication technology solutions used in the study process (e.g., MOODLE). If the study programmes within the study field are implemented in distance learning, the tools specially adapted for this form of study must also be indicated.**

NJK uses the study management platform "Canvas", which was named "Novis" - the information system of Novikontas Maritime College.

"Novis" allows NMC students to successfully combine work with studies. "Novis" includes the acquisition of both general education and professional study course content, providing students with study course methodological materials, video and audio database, availability of practical and theoretical tasks, as well as "Novis" digital study environment allows students to participate in e-consultations via "Webinar". Thanks to the "Webinar" mode, students in certain cases have the opportunity to attend study course consultations anywhere in the world without attending college. In addition, 2 tools - "Zoom" and "Google Meet" are used for communication / consultations and implementation of study courses remotely (if required by external regulations).

"Novis" has the potential to significantly improve the quality of information and learning while students are at sea. "Novis" is effective and easy to use, "Novis" is opened to students on the day of matriculation, instructions how to use "Novis" are sent and familiarization with "Novis" is held via Zoom or at College at first day of studies.

All practical work performed by students can be evaluated by the NMC lecturer in the "Novis", as well as, if necessary, if the student's independent work is incomplete, add a comment on the necessary work improvements. This process significantly complements both the communication between the student and the teaching staff, as well as improves the study process, taking into account the work regime of NMC students. The student receives notifications from the teaching staff, the directors of the study programs and the head of the study department to his / her e-mail, which was indicated in the application.

"Novis" facilities ensure the implementation of high-quality part-time study programmes, and "Novis" digital study environment has the resources and potential to further ensure the

implementation of full-time study programs: convenient uploading of works, fast examination of works, fast and efficient feedback, available materials the range is very wide.

**2.3.5. Provide information on the procedures for attracting and/or employing the teaching staff (including the call for vacancies, employment, election procedure, etc.), and the assessment of their transparency.**

In accordance with the "Novikontas Maritime College Regulations," persons in academic and administrative positions are elected through an open competition in accordance with the "Regulation on academic staff election" and procedure "Staff resources", which sets requirements for candidates and describes the procedure for electing candidates.

Academic positions are elected in an open competition, persons can apply and submit documents only for one academic position at a time. The competition is announced at least one month before the election by publishing a notice in the "Latvijas Vēstnesis" and on the NMC homepage. Elections of teaching staff using open voting take place during the Council meetings. The election shall take place during one month after the deadline for submission of documents. Academic staff is elected for six years.

If there is no complaints within 10 days after election, the accounting draws up the employment agreement and hand the agreement over to the director for signature. The employment relationship is established by concluding a written employment agreement between the Employer and the Employee on the day of commencement of employment. The employment contract shall be drawn up in two copies.

The profile of the staff is created in the "Novis" system, remote access to the college systems is provided via the Internet systems. All internal regulations are available to QMS staff on the NMS website. On the day of starting work, an instruction on work safety is given. In addition, the academic staff is informed about the content of the NMC Quality Policy and the Ethics and academic honesty policy.

Procedure is available in the annex and on the NMC website.

Link:

<https://novikontas.lv/college/en/oficial-documents/>

**2.3.6. Specify whether there are common procedures for ensuring the qualification of the academic staff members and the work quality in place and provide the respective assessment thereof. Specify the options for all teaching staff members to improve their qualifications (including the information on the involvement of the teaching staff in different activities, the incentives for their involvement, etc.). Provide the respective examples and specify the way the added value of the possibilities used for the implementation of the study process and the improvement of the study quality is evaluated.**

The procedure of NMC for ensuring the qualification and quality of work of the academic staff is

being revised, it is planned that the new procedure will be approved in in the 2nd semester of the 2021/2022 study year. The previous procedure required academic staff by the end of the election period to complete 160 hours of training programmes about innovations in the higher education system, didactics or educational work management (including at least 60 contact hours). Currently, a procedure is being developed, according to which the academic staff shall upgrade their qualification every 5 years, the NMC's new training program "Instructor - Assessor" will be offered to the teaching staff, which will be implemented in 3 stages:

1. "Instructor - Assessor" training course;
2. "Material developer" training course;
3. "Educational Process Assessor "training course.

After completing the 3 stages, the teaching staff will receive a certifying document. At the moment, the 1st stage has already been completed, which was also successfully passed to the NMC teaching staff. Stages 2 and 3 are under development.

The purpose and result of stage 1 is to prepare and train academic staff to be able to supervise and control their courses of study and to assess the competence of students in accordance with Regulation I / 6 of the STCW Convention and Section A-I / 6 of the STCW Code.

The content of the 1st stage course is as follows:

- Understanding and description of how STCW 95 requires competence-based training;
- Planning of an effective teaching environment;
- Use of a range of teaching methods effectively;
- Use of appropriate training aids;
- Production of a relevant lesson plan;
- Evaluation of teaching and learning;
- Designing a course of study.

In order to assess the effectiveness of personnel training and the added value of the opportunities used for the implementation of the study process and the quality of studies, NMC has introduced the following tools:

- Monthly training meetings attended by department heads, training representatives and management representatives, as well as the necessary persons may be invited to discuss what has been done and the improvements needed in the training process;
- Regular collection and analysis of student feedbacks;
- Annual management review meeting, at which each head of department, head of study programs, and management analyzes the results of the previous year and the need to make any changes;
- Individual assessment of teachers twice a year, based on student surveys. Based on students' feedback, discussions are conducted with the teaching staff, in which the competencies of employees to implement appropriate goals are analyzed;
- Regular audits of the study process.

#### **2.3.7. Provide information on the number of the teaching staff members involved in the implementation of the relevant study programmes of the study field, as well as the**

## **analysis and assessment of the academic, administrative (if applicable) and research workload.**

24 persons of academic staff are involved in the implementation of the study field "Seafaring". 10 persons of the teaching staff study general education study courses, respectively 14 - are specialists in the professional field. The annexes contain basic information about the teaching staff involved in the implementation of the study field. Out of 24 lecturers - 12 are in NMC elected academic staff: 3 docent and 9 lecturers.

The workload of the academic staff includes the development and updating study courses, providing lectures and contact hours, consultations, exams and tests organizing, as well as research work and participation in NJK projects. In order to ensure quality approach to the students, the maximum number of supervised qualification works per study year is determined for each lecturer, number is calculated in addition to the basic workload.

In order to facilitate the availability of international mobility for academic staff for the academic staff involved in the field of study, the Erasmus + Program Coordinator has compiled and submitted the number of mobilities available to NMC management and appropriate proposals. Information from the Erasmus + program coordinator has been taken into account and possible mobility is being planned now, as well as a survey of academic staff was carried out to understand the number of lecturers that are willing participate in international mobility.

The professionalism and competence of the staff involved in the implementation of the study field is high and is constantly being improved and upgraded.

### **2.3.8. Assessment of the support available for the students, including the support provided during the study process, as well as career and psychological support by specifying the support to be provided to specific student groups (for instance, students from abroad, part-time students, distance-learning students, students with special needs, etc.).**

NMC provides students with informative and methodological support for studies, applying to the study loan, in searching for the practice, about career development and facilitates in the maritime industry.

NMC regularly organizes Open days at College and remotely, individual meetings with the directors of study programs and / or the head of the study department, participates in the "Ēnu diena". NMC provides consultations to newcomers on the specifics of the maritime industry and on career development opportunities at sea.

Students are provided with individual support from the directors of study programmes and the head of the study department. The directors of the study programmes and the head of the study department are always available for the students to discuss the progress of the students' studies, productivity, motivation or reasons for lack of motivation, to provide information about sea practice vacancies.

All information about the study field, study programs, contacts of the teaching staff and administrative staff, study course materials, tasks, procedures, rules and regulations are available

for students in the "Novis". On the first day of the study, a meeting with the director of the study programme is organized for the students with the aim to acquaint the student with the "Novis" and NMC study environment.

NMC functioning is based on the "open door principle", which allows students to discuss quickly short questions with the directors of the study programmes and the head of the study department, but for discussion of more serious issues with the director / deputy director of NMC it is recommended to appoint the date and time.

Psychological support is available for NMC students. The international hotlines and e-mails in the event of an urgent need for psychological support while at sea can be found in "Novis", as well as NMC contacts that can be used in cases where the student feels:

- difficult to cling to tasks and overcome laziness;
- prolonged stress and anxiety or experiencing significant changes in life;
- crisis situations.

NMC processes applications and arranges meetings with a specialist or, if the student wishes to contact a psychotherapist by himself (herself), the college provides the student with specialist contacts.

Study courses "Engine Room Resource Management" and "Bridge Resource Management" includes a mandatory psychological assessment of students. After the assessment, students receive detailed reports with recommendations via e-mail.

Taking into account that since 2013 NMC has only implemented part-time Study Programmes, the support mentioned above is NMC's experience with part-time students.

Support mechanisms for foreign students are similar to those which used for supporting part-time students. Foreign students are provided with consultations on visas, residence permits, on an accommodation (NMC has cooperation with Riga First Medical College of the University of Latvia), on the use of public transport and other issues related to entry and living in Latvia.

## **2.4. Scientific Research and Artistic Creation**

**2.4.1. Description and assessment of the fields of scientific research and/or artistic creation in the study field, their compliance with the aims of the higher education institution/ college and the study field, and the development level of scientific research and artistic creation (provide a separate description of the role of the doctoral study programmes, if applicable).**

The fields of NMC's scientific researches are the development of the maritime industry, the improvement of the study field "Seafaring", using new technologies, inventing new methods and improving communication in the industry, the psychological evaluation of the representatives of the maritime industry.

One of the objectives of NMC for 2021-2027 is to carry out and develop high-quality scientific activity, including improving the current situation with research. NMC's research fields fully comply with the objectives of the college and the field of study to prepare competitive specialists for the labor market with extensive knowledge of maritime industry.

The "Novikonta Maritime College Regulations" defines that one of the tasks of the NMC is to conduct research in accordance with the study profile and to promote the research work of students.

NMC's research fields are initiated by the Council, employers, industry representatives, cooperation partners, and implemented by NMC's academic and non-academic staff, as well as students.

At the moment, the procedures according to which research fields can be centrally approved by the Council for a certain period of time are in the process of being developed, the fields defined at the beginning of the section including in the psychological evaluation of seafarers were suggested by employers and specialists of maritime industry due to high interest in using new technology for the development of the industry. The procedure governing the activities of scientific research will be approved in 2021/2022 study year in the second semester in order to strengthen the importance of research activities and further development of research in NMC.

#### **2.4.2. The relation between scientific research and/or artistic creation and the study process, including the description and assessment of the use of the outcomes in the study process.**

NJK implements first-level professional higher education part-time extramural programs. Engaging students and academic staff in scientific research is a challenging process due to the employment of students and lecturers, but nevertheless the research activities are in the progress. Students are also actively involved in research work by developing qualification works. Academic and non-academic staff are involved in research mainly by the initiative of employers, industry representatives and cooperation partners, less often by the initiative of the Council.

In order to improve the connection of scientific research with the study process, NMC will define the description of the process of using research outcomes in the study process in new regulations that will regulate the scientific research. Currently, some research results that coincide with the content of the study courses are used to inform students about the innovations. In the future, it is envisaged that the research outcomes will be used in the implementation of the study courses in order to base the study process on practical experience in the maritime sector.

All NMC research results are used in the study process, as the teaching staff is directly involved in all research. For instance:

1) In 2017, the NMC teaching staff performed a research and simulation "Modeling of the Liepāja Port Navigation Channel on a Simulator". Staff involved - Igor Lednev, Ainārs Rukkalns, Jānis Sticenko, Vladimirs Aņisimovs, Anatolijs Ševcovs, Nikolajs Judajevs, Aleksandrs Ponomarjovs, Vladimiris Mišins, Viktor Agutin, Aleksandrs Safronovs, Dmitrii Sheliakov, gained invaluable experience in manoeuvring in special conditions and this knowledge and skills are applied in conducting training. The same equipment and the same port have been used in the study process to make sure that students are able to apply the knowledge in real conditions. During the research, specific simulator tasks were developed and implemented in the learning process.

2) In 2021, NMC will conduct a study of the psychological evaluation of seafarers based on the latest data on the mental health and well-being of seafarers, as well as accidents at sea, the most common causes and human factors of which are NMC's cooperation with CleverPoint Marine to make evaluation and improvement of human psychological ability. As part of this collaboration, NMC is purchased innovative technology - a set of virtual reality goggles, equipment with biometric



sensors, and a program that measures the human brain and heart rate.

With the help of this technology, NMC has started to assess the cognitive, psychological and physiological condition of seafarers during various virtual reality tasks. A report shall be issued for this task with a detailed description of the seafarers' psychophysiological abilities and recommendations for improving those abilities and general well-being. New technology has been used to improve the recruitment, growth, training and research of seafarers. The psychological assessment of this is included in the study process and all students in the respective course go through this process, receiving excellent feedback, as well as use tasks to improve their psychological abilities.

**2.4.3. Description and assessment of the international cooperation in the field of scientific research and/or artistic creation by specifying any joint projects, researches, etc. Specify those study programmes, which benefit from this cooperation. Specify the future plans for the development of international cooperation in the field of scientific research and/or artistic creation.**

NJK is currently actively establishing international cooperation, because international cooperation in scientific research is an essential precondition for the competitiveness of the college, therefore it is planned to conduct various new research on the relevant issues in the maritime sector within the established cooperation. During the last 6 years, NJK representatives have actively participated and continue to participate in international conferences as listeners, as well as actively participate and share research results and reports.

Activities made as part of international cooperation during the last six years:

1) Active participation in IASST (International Association for Safety and Survival Training) conferences and visits to training centers:

- 2015 - Lithuania, Klaipeda. Lietuvos Aukštoji Jūreivystės Mokykla.
- 2015 - Cork, Ireland. National Maritime College of Ireland (NMCI). NMC representative presented: "STCW Today and Tomorrow: The Perspective of Maritime Education and Training Centers".
- 2016 - Helsinki, Finland.
- 2016 - New Orleans, Louisiana, USA. Shell Robert Training Center and Falck Safety Services.
- 2017 - Batumi, Georgia. Batumi State Maritime Academy.
- 2017 - Constanta, Romania. CERONAV.
- 2018 - Reykjavik, Iceland. ICE-SAR.
- 2019 - Alesund, Norway. ASK Safety.
- 2020 - Port-Harcourt, Nigeria.

2) Erasmus + projects - Traineeships:

- 2016 - Reykjavik, Iceland. Icelandinc Association for Search and Rescue
- 2017 - Alesund, Norway. ASK Safety
- 2017 - Lohja, Finland. Meriturva

- 2018 - Alesund, Norway. ASK Safety
- 2018 - Lorient, France. CEPS
- 2018 - Terschelling, The Netherlands. Maritime Institute Willem Barents
- 2019 - Southampton, Great Britain. Warsash Maritime academy
- 2020 - Egersund, Norway. Energy Innovation.
- 2020 - Southampton, United Kingdom. Solent University
- 2021 - Constanta, Romania. CERONAV (digital mobility)
- 2021 - St. John's, Canada. Fisheries and Marine Institute of Memorial University of Newfoundland. (digital mobility)
- 2021 - Constanta, Romania. GSP training center.

### 3) Other:

- 2015 - St. Petersburg, Russia. Two conferences: "Maritime Education and Training: Trends and Challenges in the XXI Century" and "Professional Manpower Policy - A Straight Way to Maritime Safety"
- 2015 - Newcastle, UK. MARSIM 2015 conference.
- 2015 - Bremen, Germany. Seminar for maritime professionals, RIGEL.
- 2015 - Cyprus. Maritime Conference.
- 2015 - Kazakhstan. Research seminar: "Problems of development of merchant shipping in Kazakhstan" - Dmitrijs Semjonovs (Deputy Director of NMC) presented the work "Close Loop of Maritime Education: work based learning"
- 2016 - Brussels, Belgium. Sectoral Social Dialogue Committee.
- 2016 - Malmo, Sweden. Baltic Leaders Program.
- 2016 - Colonia, Germany. Seminar: "The idea of Europe - what Erasmus + can provide"
- 2016 - Aarhus, Denmark. ASEM Forum - Lifelong Learning Program for 21st Century Skills.
- 2016 - Lisbon, Portugal. EMSA working group.
- 2017 - Donso, Sweden. Donso Shipping Meet.
- 2017 - Newcastle, UK. FISH meeting.
- 2019 - Donso, Sweden. Donso Shipping Meet.
- U.c.

### 4) Cooperation agreements concluded with:

- St. John's, Canada. Fisheries and Marine Institute of Memorial University of Newfoundland
- SC GRUP SERVICII PETROTIERE TRAINING SRt, CONSTANTA / ROMANIA

On June 16 and 17, 2016, an international seminar - Maritime Innovation Race - took place at NMC. The event, sponsored by the Region Blekinge / Baltic Maritime Science Park, Linneus University, Sweden Institute, Novikontas Maritime College, brought together maritime students and academic staff from maritime universities and colleges in the Baltic Sea region: Sweden, Estonia, Latvia,

Lithuania and Poland. The aim of the Maritime Innovation Race was to develop new ways to manage maritime education programs and training, using new technologies, inventing new methods and improving communications in the industry. Within 24 hours, participants in mixed groups developed new tools and concepts for education and training, brainstorming, commenting on each other's ideas and finalizing their work.

On May 16-18, 2018 2 representatives of NMC 2 participated in the International Scientific Conference "The Baltic Sea: Gateway or Cul de Sac?" in Klaipėda, Lithuania. They presented a report entitled "Economic, Social and Political Benefits for the State from the Export of Seafarers to the International Maritime Labor Market: The Case of Latvia". Preliminary results on this complex topic were presented during the conference, as several studies have already been conducted. Later, studies will be conducted to assess the impact and contribution of Latvian seafarers. The initiators of the topic were the Latvian Maritime Union, Maritime Administration of Latvia" and Novikontas Maritime College. The presentation has received positive feedback from the conference participants and organizers. As certain parts of the topic are related to similar Dr. Viktoras Senčilas and Dr. Genutė Kalvaitienė research, the management of Novikontas and the Lithuanian Maritime Academy have agreed on the exchange of experience, tools and cooperation in this field.

NMC has great potential to realize international scientific researches, thus NMC's plans to continue establishing new relations with foreign institutions in order to significantly increase the number of scientific research works carried out in the of cooperation. Both study programmes at NMC acquire new materials and new experience from cooperation.

**2.4.4. Specify the way how the higher education institution/ college promotes the involvement of the teaching staff in scientific research and/or artistic creation. Provide the description and assessment of the activities carried out by the academic staff in the field of scientific research and/or artistic creation relevant to the study field by providing examples.**

The development and upgrading qualifications of the academic staff is based on variety of methods for development, which includes not only participation in the qualification upgrading training programme, but also the promotion of scientific research.

The research activities of the academic staff enable the teaching staff to continuously develop at work, because in order to conduct research, the researcher must be informed about the latest discoveries and theoretical findings in his / her field of research. Secondly, research requires competence in research methodology. This knowledge and competence is used while mentoring students' research works. Thirdly, the teaching staff informs the students about the results of the research work within the study courses for which the teaching staff is responsible.

Academic staff has the opportunity to participate in local and international projects, attend both international and Latvian conferences. These activities provide opportunities to students to get acquainted with current scientific and theoretical findings and practical research conducted both abroad and in Latvia, as lecturers have the right to integrate the latest findings from conferences into the content of study courses.

The researches of the teaching staff engaged in the study programme implementation have a positive impact on the study process both directly, involving students in research activities, and indirectly, as the teaching staff, working with literature and the latest publications on various

research issues, acquires higher academic competence and professional skills, as well as promotes a better presentation of the study material.

NMC uses the following mechanism to involve teachers in research:

- There is internal communication about all planned and active projects;
- A lecturer who engages in research does it during working hours and is partially relieved of other responsibilities during this time;
- Teachers are offered both material and financial resources for the implementation of research;
- After successful research and implementation of projects, the remuneration and responsibilities of the teaching staff can be reviewed;
- Teachers who participate in research and projects are sent on exchange trips abroad to improve their knowledge and skills;
- Etc.

The College provides freedom for academic staff to choose research topics. Although a number of research and projects are in progress, the procedure for research arrangements and the mechanism for involving academic staff are currently being reviewed with the aim to improve them so as to ensure the continued development of scientific activities.

In 2017, Novikontas Maritime College received an offer from the Port of Liepaja to conduct a study and simulation: "Modeling of the navigation channel of the Port of Liepaja on a simulator" before starting the dredging works in the port water area. The aim of the work - as a result of modeling to determine the optimal route and dimensions of the navigation channel in the section from the Middle Gate of the port to the water area of berths N49, N50, N51.

NMC started a new project in 2021.

Based on the latest data on seafarers' mental health and well-being, as well as accidents at sea, the most common cause of which is human error, NMC has partnered with CleverPoint Marine to assess and improve people's psychophysiological abilities. As part of this collaboration, NMC purchased an innovative technology - a set of virtual reality goggles equipped with biometric sensors, and a program that measures the human brain and heart rate. With the help of this technology, NMC has started to assess the cognitive, psychological and physiological condition of seafarers during various virtual reality tasks. As a result of these tasks, a report shall be issued with a detailed description of the seafarers' psychophysiological abilities and recommendations for improving those abilities and general well-being. The new technology will be used to improve the recruitment of seafarers, career growth, trainings and to do new researches.

These are 2 examples that confirm that the projects implemented by NMC are carried out within the the maritime sector with the aim of developing the sector.

One NMC lecturer had a scientific publication during the reporting period, information is available in the annex "List of the publications, patents, and artistic creations of the teaching staff over the reporting period".

**2.4.5. Specify how the involvement of the students in scientific research and/ or applied research and/or artistic creation activities is promoted. Provide the assessment and description of the involvement of the students of all-level study programmes in the relevant study field in scientific research and/ or applied research and/or artistic creation activities by giving examples of the opportunities offered to and used by the students.**

Students of the study field are involved in research activities during the development of the qualification work, as well as by participating in scientific conferences organized by NMC and other universities and colleges. Taking into account that the NMC is currently developing a new research agenda, an analysis of the effectiveness of the student engagement mechanism will be carried out in the beginning of 2022, although a review of the mechanism is already planned and a decision is being taken to increase motivation via integration bonuses for the students who are doing researches. The main difficulty to NMC is the employment of students, because NMC implements for now only part-time study programmes, which means that big number of students are employed seafarers. The situation can be significantly changed by starting the implementation of a full-time study programmes.

As part of the writing the qualification work, students are free to choose a topic or study the problem, provided that the topic / problem is directly related to the maritime sector.

On June 16 and 17, 2016, an international seminar - Maritime Innovation Race - took place at NMC. The event, sponsored by the Region Blekinge / Baltic Maritime Science Park, Linneus University, Sweden Institute, Novikontas Maritime College, brought together maritime students and academic staff from maritime universities and colleges in the Baltic Sea region: Sweden, Estonia, Latvia, Lithuania and Poland. The aim of the Maritime Innovation Race was to develop new ways to manage maritime education programs and training, using new technologies, inventing new methods and improving communications in the industry. Within 24 hours, participants in mixed groups developed new tools and concepts for education and training, brainstorming, commenting on each other's ideas and finalizing their work.

In 2021, groups of students from Novikontas Maritime College participated in an Innovation Competition organized by the Latvian Maritime Education and Research Development Fund. NMC students implemented two projects on the seafarers well-being:

- Hobbies at sea and home;
- Developing a friendly crew relationship on ships between engine room and deck crew members.

Students are informed that they are free to share research ideas with study programme directors and / or lecturers. NMC is always ready to support students in scientific researches.

NJK takes the following measures to promote student involvement in research:

- Publishes research projects, competitions and seminars available from various institutions on the student sharing platform "Novis";
- Various research projects are supported by funding;
- Students who are involved in a research activity can be sent on ERASMUS + exchange trips to supplement their knowledge;
- The student can receive an higher grade for the final grade when conducting research in the appropriate study course;
- Research is an important part of studies, students' research skills are developed in different study courses and each student has at least one compulsory research work, which is a qualification work, thus research is a mandatory requirement.

#### **2.4.6. Provide a brief description and assessment of the forms of innovation (for instance, product, process, marketing, and organisational innovation) generally used in the higher**

**education institution, especially in study field subject to the assessment, by giving the respective examples and assessing their impact on the study process.**

The introduction of new trends / innovations is one of the strategic priorities of the NJK.

NMC actively plans and implements innovations in the study process, as well as promotes and popularizes the development of innovations among students, employees and customers by setting a good example and motivating. As NMC operates in a highly innovative and fast-moving maritime sector, there have been significant improvements in recent years, ranging from the transition from paper to electronic charts, the use of alternative fuels and emission controls, to the testing of electric and autonomous ships. NMC keeps up with the time and is constantly innovating in its training process. To make this possible, NMC has established a close network with international educational institutions and training centers, there is regular communication and exchange mobilities, in order to increase the competence and knowledge that provides opportunities to use innovation at work. NMC is an active member of the International Association of Safety and Survival Training (IASST), which is working to improve safety and rescue training, which is also one of the primary areas of maritime education. The organization has 148 active seafarers' education and training institutions from 50 different countries, covering all continents. Thus, NMC's involvement in global maritime training processes is significant, and it is possible to implement this knowledge and innovation in its educational process.

In 2020, Novikonta Maritime College developed a safety and rescue simulator on water. NMC has gained new experience from visiting many countries around the world to study and analyze the best international seafarers' training centers and institutions and from that experience has developed plan and built a Swimming Pool with wave, wind, rain, thunder and lightning simulations that can fully simulate the real conditions at sea. There are no other swimming pools of this quality and fully equipped in the Baltic States. This swimming pool is one of the best of its kind in Europe.

In 2021, NMC started cooperating with CleverPoint Marine, which evaluates and improves people's psychophysiological abilities. As part of this collaboration, NMC purchased an innovative technology, a set of virtual reality goggles equipped with biometric sensors, and a program that measures the human brain and heart rate. With the help of this technology, NMC has started to assess the cognitive, psychological and physiological condition of seafarers during various virtual reality tasks. This type of assessment can be used to assess students' readiness for seagoing service.

All innovations that NMC integrates into work significantly affect the improvement and development of study processes, NMC has new technologies that increase the quality of the study process.

## **2.5. Cooperation and Internationalisation**

**2.5.1. Provide the assessment as to how the cooperation with different institutions from Latvia (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field contributes to the achievement of the aims and learning outcomes of the study field. Specify the criteria by which the cooperation partners for the study field and the relevant study programmes are selected and how the cooperation is organised by describing the cooperation with employers. In addition, specify the mechanism for the attraction of the**

## **cooperation partners.**

### **The main areas of cooperation that ensure the achievement of study results in the field of study are:**

- Ensuring and improving the study process and quality, including the improvement of program content and the forecast of the need for specialists (for example, cooperation with other colleges on the use of resources; cooperation with maritime companies on attracting maritime professionals to the study process);
- Ensuring internships and students' professional development by offering internships (ERASMUS + mobility, cooperation with employers in Latvia and abroad);
- Management and review of studies and final theses, offer of final thesis topics;
- Involvement of professionals (specialists in the maritime sector) in the study process and in the composition of the state examination commission;
- Organization and implementation of other non-study activities, such as Enkurs, Career Days, Ēnu diena.

As Novikontas Maritime College actively cooperates with various institutions, including universities / colleges, employers, employers' organizations, municipal institutions, non-governmental organizations, etc. NMC stakeholders have been identified whose needs and expectations NMC strives to meet during its operation. The NMC stakeholders and their requirements are as follows:

#### **- Students:**

- Effective and modern training;
- Knowledge, understanding and skills to satisfy employers and be able to work safely;
- Receive the necessary certificates approved by the organization;

#### **- Naval and manning companies:**

- Improving the knowledge and skills of seafarers at a reasonable cost;
- Certification of seafarers;
- Service coherence and transparency;
- All trainings in one place;

#### **- Shipowners:**

- There are no maritime accidents related to the human factor;
- There are no human delays in freight transport;

#### **- Certification bodies:**

- Quality training according to their standards;
- Quality communication;

#### **- Maritime and transport trade associations:**

- Increasing the capacity of the maritime and transport workforce;

#### **- Educational associations:**

- Quality education in accordance with the law;

#### **- Competitors:**

- Fair competition;

- Lecturers, instructors and other staff:

- Highly valued and stable work with competitive remuneration and social guarantees;
- Opportunities for personality development and growth;

- Owners:

- High returns with low risk;
- Company and turnover growth;
- Company prestige.

Communication with stakeholders is organized in the direction of formal and informal communication.

### **Selection of cooperation partners**

NMC has established a close network with both local and international educational institutions and training centers with which regular communication and exchange trips take place in order to increase the competence and knowledge that provides opportunities to innovate in their work. In the relevant periods related to global maritime trends, the most appropriate partners are selected to contribute to the development of the NMC. NMC currently has a wide range of partners within the EU, and NMC is regularly seeking to expand its partnership horizons beyond the EU, such as a collaborative project with the Canadian Institute this year, which has shown considerable interest in further projects.

### **Description of the organization of NMC types of cooperation**

Cooperation with partners takes place through various seminars, workshops and projects. NMC has implemented numerous projects in cooperation with various institutions both in Latvia and around the world. At the moment, NMC is actively cooperating with the Latvian authorities:

- Maritime Academy of Latvia - various projects related to student research and teaching internships;
- Liepāja Marine College - cooperation in the provision of maritime education;
- Turība University - use of libraries and opportunities for graduates to continue their studies in bachelor's programs;
- Transport and Telecommunication Institute - long-term cooperation in the field of science, research and innovation / provision of internships and professional development;
- Vocational education competence center "Riga Technical College" - agreement on the use of resources;
- Mechanics and Technology College of Olaine - use of laboratory resources;
- Maritime Administration of Latvia - co-operation in organizing various student attraction events (Anchor, Shadow Days, Open Doors, etc.);
- Latvian Maritime Union - implementation of various projects and seminars;
- Employers' Confederation of Latvia (LDDK) - implementation of various projects and seminars;
- Various maritime organizations - involvement of staff in study processes;
- CleverPoint Marine - Psychological assessment of seafarers using virtual reality and biometric sensor equipment;
- etc.

### **Evaluation of NMC cooperation with Latvian institutions to achieve the goals of the study field**

Each NJK cooperation has a specific goal and each cooperation helps to achieve the overarching



goals of the study field:

1. Quality studies and research;
2. Excellent communication and partnership;
3. Integration of technological and pedagogical development tendencies in the study environment;
4. Globalization.

Goal	Collaborations that help achieve goals	Self - evaluation of collaboration
Quality studies and research	<ul style="list-style-type: none"> <li>· Maritime Academy of Latvia</li> <li>· Liepāja Marine College</li> <li>· Turība University</li> <li>· Transport and Telecommunication Institute</li> <li>· CleverPoint Marine</li> </ul>	Good
Excellent communication and partnership	<ul style="list-style-type: none"> <li>· Various maritime organizations</li> </ul>	Very good
Integration of technology and pedagogy development tendencies in the study environment	<ul style="list-style-type: none"> <li>· Mechanics and Technology College of Olaine</li> <li>· CleverPoint Marine</li> <li>· Vocational education competence center "Riga Technical College"</li> <li>· Transport and Telecommunication Institute</li> </ul>	Good
Globalization	<ul style="list-style-type: none"> <li>· Maritime Academy of Latvia</li> <li>· Latvian Maritime Union</li> <li>· Employers' Confederation of Latvia</li> <li>· Various Maritime organizations</li> </ul>	Almost good

**2.5.2. Provide the assessment as to how the cooperation with different institutions from abroad (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field contributes to the achievement of the aims and learning outcomes of the study field. Specify the criteria by which the cooperation partners suitable for the study field and the relevant study programmes are selected and how the cooperation is organised by describing the cooperation with employers. In addition, specify the mechanism for the attraction of the cooperation partners.**

Novikontas is actively involved in the IASST (International Association for Safety and Survival Training), which is working to improve safety and rescue training, what is also one of the primary areas of maritime education. The organization has 148 active seafarers' education and training institutions from 50 different countries, covering all continents. The IASST regularly organizes conferences and seminars, thus facilitating communication, strengthening contacts with already known partners, as well as building new partners with the maritime industry from around the world, addressing common maritime issues. Participation in various international exhibitions and forums in Europe, such as the maritime sector and education promoted in Donso (Norway), is also being used to improve networking.

The Erasmus + platform is also actively used to attract partners, within the framework of which over the last five years NJK has cooperated with more than 10 partner institutions in staff training, as well as established cooperation with numerous maritime organizations in student training and

internships.

Cooperation is regularly expanded and strengthened with existing cooperation partners, and new forms of cooperation are emerging, increasing mutual interest in ensuring successful results.

Considering Latvia's integration into the European Union and the globalization of the maritime sphere in the world, the study programs "Maritime Transport" and "Marine Engineer" are implemented in English. For this reason, students learn internationally used terminology during their studies, as the maritime language around the world is English. NMC's strategy is to become an internationally recognized educational institution open to foreign students, therefore the following development goals have been set:

- Development of international partnerships and cooperation;
- Expanding students' international experience;
- Improving the quality of international students' studies;
- Attracting foreign students;
- Expanding staff opportunities and increasing motivation to get involved and actively participate in the internationalization process.

Most of the cooperation partners are employers for students to provide an internship place. These partners are both within the ERASMUS + program and in Latvia.

Some partners are project partners, such as The Fisheries and Marine Institute of the University of Newfoundland in Canada. Within the framework of the project, the study programs were improved, the experience was exchanged and as a result the programs were improved and the improvement of study materials was started. There is also a partnership with the Warsash Maritime School at Solent University, which works in the maritime field.

The largest ERASMUS + partners are Knutsen (Norway), Matrix Shipmanagement (Cyprus), Stena Line (Denmark / Latvia), Norbulk Shipping (UK), Utkilen (Norway).

When choosing cooperation partners, attention is paid to the partner's reputation, its main activity goals, connection with the needs of the study field and the specifics of the study programme.

### **Evaluation of NMC cooperation with foreign institutions to achieve the goals of the study field**

Each NMC cooperation has a specific goal and task, as well as each cooperation helps to achieve the overarching goals of the study field:

1. Quality studies and research;
2. Excellent communication and partnership;
3. Integration of technological and pedagogical development tendencies in the study environment;
4. Globalization.

The result of each international cooperation is a task that helps to achieve the goals of the study field, for example.

#### **1) Results achieved by Erasmus + mobility projects:**

- Acquired new knowledge and skills in the professional field;
- Improved curricula;
- Acquired knowledge of new teaching methods;
- Improved quality of study program content;
- Expanded international network of professional cooperation.

## 2) Cooperation in the IASST network:

- Promote effective maritime safety and survival training;
- Facilitate the exchange of ideas and information to improve the quality of training internationally;
- Facilitate the exchange of instructors;
- Promote the development and improvement of safety and survival technologies;
- Build and maintain links with government, industry, national and international organizations;
- Provide advisory services in safety and survival training;
- To increase the visibility of the Association in order to promote and increase the number of members internationally.

## 3) Cooperation with international maritime employment organizations:

- Completion of student internship tasks;
- Involvement of students in international exchange projects;
- Adaptation of study courses to the requirements of employers;
- Etc.

**2.5.3. Specify the system or mechanisms, which are used to attract the students and the teaching staff from abroad. Provide the assessment of the incoming and outgoing mobility of the teaching staff in the reporting period, the mobility dynamics, and the issues which the higher education institution/ college faces with regard to the mobility of the teaching staff.**

NMC uses the following mechanisms to attract foreign students and teachers:

- Digital marketing;
- NMC website;
- Membership in various associations (IASST, Maritime Union, etc.);
- Social networks (linkedin, facebook, instagram, etc.);
- Exhibitions (both local and international);
- Conferences (both local and international);
- Projects (Erasmus + u.c.);
- Etc.

Attracting foreign students and teachers is promoted through the lifelong learning program ERASMUS +, which was launched in NMC in 2017. Also, in order to improve the interaction between students and teachers, discussions are held and mutual cooperation with employers is provided for the provision of internships.

Although at the moment NMC has implemented only outgoing student mobility, foreign students at NMC can also implement study mobility, which will be emphasized in the next reporting period. Study mobility lasts from 3 months (one academic course or trimester) to one study semester, or by agreeing on special mobility conditions. During the reporting period, 70 ERASMUS + student mobilities have taken place, all student mobilities were outgoing, because as both study programs at NMC are part time studies, it is difficult to involve foreign students in exchange programs.

Foreign academic staff in Novikontas can implement two types of mobility:

- Learning mobility or exchange of staff experience, which includes staff professional

development activities and job shadowing activities in Novikontas.

In the spring of 2021, 6 virtual exchange mobilities were implemented with The Fisheries and Marine Institute, part of the Newfoundland Memorial University in Canada.

- Teaching mobility or the mobility of academic staff, which allows invited staff from the company to lead a class in Novikontas, or for Novikontas academic staff to lead classes in another European country.

Improving the competencies of the teaching staff is integral to ensuring the quality of the study process. During the reporting period, the mobility of teachers of study fields has taken various forms. Teachers have developed their competencies and knowledge by participating in teacher exchange programs, such as ERASMUS +.

During the reporting period, 24 ERASMUS+ mobilities were organized.

The mobility of academic staff is influenced by a number of factors. The application process for mobility is individual, as it is limited due to the daily academic activities of the teacher and makes it difficult to plan mobility.

During the review, improvements and greater involvement of academic staff in mobility, acquisition of professional and competence of staff have been observed.

The involvement of staff in mobility from abroad is limited by the existence of a long bureaucracy and the financial aspects that exist at European and global level. More funding is needed to attract academic staff from leading universities.

Students can regularly apply for ERASMUS + internship mobility. The application process is described in the policy at <https://sites.google.com/view/novikontas-erasmus/home>. Students have the opportunity to go to ERASMUS + practice from 2 - 12 months, as well as graduate practice within one study program. In the student NOVIS system, information about opportunities in the ERASMUS + program is sent to students every month. The main reason why students do not go on internship mobility in ERASMUS + programs is that the ERASMUS + program supports internships located in European countries for a minimum of 61 days. A large proportion of students work in parallel, which affects their motivation to participate in mobility.

## **2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures**

**2.6.1. Assessment of the fulfilment of the plan regarding the implementation of the recommendations provided by the experts during the previous accreditation of the study field, as well as the assessment of the impact of the given recommendations on the study quality or the improvement of the study process within the study field and the relevant study programmes.**

Evaluation of the impact of the previous recommendations of the accreditation process on the quality of studies or improvement of processes in the study direction and the corresponding study programs:

- 1) The expansion and use of the NOVIS platform has been positively assessed by NJK students and

teaching staff. The NOVIS platform provides fully prepared training materials for all subjects and all topics that fully cover the need for the course, but in parallel, as most of the training takes place on board, students use the ship's documentation - technical documentation, all maritime documentation (it is a mandatory requirement that the ship has all the necessary maritime documentation, such as the conventions - STCW, SOLAS, MARPOL, etc.)

2) The involvement of students in research, although somewhat difficult due to the specific of NMC students, is that they study obtain part-time program and mostly on board, and at the same time are active seafarers, there are positive trends in student involvement in various projects such as Erasmus + number of students have acquired knowledge in foreign companies. NMC regularly publishes innovation competitions developed by the Latvian Maritime Education and Research Development Fund on the NOVIS platform, so that students have the opportunity to participate in these research competitions. In the previous research competition, NMC was represented by 4 groups of students.

This involvement of students in various projects and research provides NMC with the necessary feedback from students, which also helps to improve the quality of study programs and introduce various student innovations or needs in the study process.

3) Due to these improvements, the quality of teachers and studies has increased, which can be seen in the feedback from students and companies, as well as during audits. Positive feedback has also been received from the Maritime Administration of Latvia (MAL) in connection with NMC lecturers, as MAL is directly involved in the teacher training process by taking the 1st grade - Instructor / Assessor exam and issuing the certificate.

4) The recognition of NMC in Latvia has significantly increased, as NMC representatives are actively involved in the association of Latvian colleges and in various cooperation projects with similar institutions in Latvia, raising the level of knowledge and skills of staff, involvement of students in processes and material and technical base.

5) Investments of NMC management and owners in expanding the methodological, informative and material technical base of the college are an unprecedented case in the history of Latvia, and cannot be compared with income from studies, showing NMC's desire and opportunities to develop maritime direction in Latvia. Thanks to these investments, maritime students in Latvia have access to the highest quality study conditions that are comparable to all the best maritime institutions in the world.

6) NMC implements 2 study programs in accordance with all national and international standards, and the plan meets the training requirements of seafarers and provides high quality practical training, as a result of which NMC students are ready to start working on board as ship's officers immediately after graduation. 100% of NJK graduates are guaranteed a highly paid job on board ships of various international companies, from which we have received positive feedback about our graduates.

An in-depth analysis on of the Implementation of Recommendations is available in the annex.

**2.6.2. Implementation of the recommendations given by the experts during the evaluation of the changes to the study programmes in the respective study field or licensed study programmes over the reporting period or recommendations received during the procedure for the inclusion of the study programme on the accreditation form of the study field (if applicable).**

**Implementation of recommendations in accordance with the decision of the study accreditation commission on accreditation of the study field-**

**STUDY AREA “Mechanics and Metalworking, Heat Power Engineering, Heat Engineering and Mechanical Engineering”, FIRST LEVEL PROFESSIONAL HIGHER EDUCATION PROGRAM “MARITIME TRANSPORT”, August 28, 2019**

No.	Expert group recommendation	NJK activities	Implementation of the recommendation
1.	In accordance with the Cabinet of Ministers Regulation No. 716 “Minimum requirements for the content of the compulsory civil protection course and the content of civil protection training for employees”, to make changes in the study programs “Maritime Transport” and “Ship Mechanics” implemented by NJK, envisaging a Civil Protection course in the amount of at least 1 credit point.	Changes were made in the study programs “Maritime Transport” and “Marine Engineering”, a training course was introduced: “Civil Defense” in the amount of 1 credit point.	Done
2.	In accordance with the requirements of Section 56, Paragraph three of the Law on Higher Education Institutions, it is necessary to include the acquisition of the state language for foreign students in the compulsory amount of study courses in the amount of at least 1 credit point.	Changes were made in the study programs “Maritime Transport” and “Marine Engineering”, a study course was introduced: “Latvian Language for Foreign Students” in the amount of 1 credit point.	Done

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<b>3.</b>	According to the Cabinet of Ministers Regulation No. 793 "Regulations for Opening and Accreditation of Study Areas" to accredit the study programs "Maritime Transport" and "Marine Engineering" implemented by NJK in the study direction "Seafaring" until 2021.	According to the recommendation, NJK accredits both of its study programs under the study field "Seafaring".	In the process of execution.
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# Annexes

I - Information on the Higher Education Institution/ College		
Information on the implementation of the study field in the branches of the higher education institution/ college (if applicable)		
List of the governing regulatory enactments and regulations of the higher education institution/ college	List of the governing regulatory enactments and regulations.pdf	Saraksts ar galvenajiem iekšējiem normatīvajiem aktiem un regulējumiem.pdf
The management structure of the higher education institution/ college	NJK struktūra_ENG.pdf	NJK struktūra_LV.pdf
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	The plan for the development of the study field .pdf	Studiju virziena attīstības plāns.pdf
The management structure of the study field	The management structure of the study field.pdf	Studiju virziena struktūra.pdf
A document certifying that the higher education institution or college will provide students with opportunities to continue their education in another study programme or another higher education institution/ college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.	Sadarbības līgums ar LJK.edoc	Sadarbības līgums ar LJK.edoc
A document certifying that the higher education institution or college guarantees compensation for losses to students if the study programme is not accredited or the study programme license is revoked due to actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.	A document certifying that the college guarantees compensation for losses to students.pdf	Apiecinājums, ka NJK studējošajiem garantē zaudējumu kompensāciju.pdf
Standard sample of study agreement	Studiju līgums_study agreement.pdf	Studiju līgums_study agreement.pdf
II - Description of the Study Field - 2.2. Efficiency of the Internal Quality Assurance System		
Analysis of the results of surveys of students, graduates and employers	Analysis of the results of surveys of students, graduates and employers.pdf	Studējošo, absolventu un darba devēju aptauju rezultātu analīze.pdf
II - Description of the Study Field - 2.3. Resources and Provision of the Study Field		
Basic information on the teaching staff involved in the implementation of the study field	Mācībspēku saraksts_List of teaching staff.xlsx	Mācībspēku saraksts_List of teaching staff.xlsx
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	CV.zip	CV.zip
A statement signed by the rector, director, head of the study programme or field that the knowledge of the state language of the teaching staff involved in the implementation of the study programmes within the study field complies with the regulations on the state language knowledge and state language proficiency test for professional and official duties.	Apiecinājums Eng.pdf	Apiecinājums Lv.pdf
A statement of the higher education institution/ college on the respective foreign language skills of the teaching staff involved in the implementation of the study programme at least at B2 level according to the European Language Proficiency Assessment levels (level distribution is available on the website www.europass.lv, if the study programme or part thereof is implemented)	Angļu valodas prasme.edoc	Angļu valodas prasme.edoc
II - Description of the Study Field - 2.4. Scientific Research and Artistic Creation		
Summary of quantitative data on scientific and/ or applied research and/ or artistic creation activities corresponding to the study field in the reporting period.	NJK Inovācijas un pētniecība ENG.pdf	NJK Inovācijas un pētniecība LV.pdf
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	Mācībspēku saraksts_List of teaching staff.xlsx	Mācībspēku saraksts_List of teaching staff.xlsx
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	Sadarbības līgumi_Cooperation Agreements.pdf	Sadarbības līgumi_Cooperation Agreements.pdf
Statistical data on the teaching staff and the students from abroad	Statistikas dati par ārvalstu studējošajiem un mācībspēkiem_.pdf	Statistikas dati par ārvalstu studējošajiem un mācībspēkiem_.pdf
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	Erasmus statistika.xlsx	Erasmus statistika.xlsx
Statistical data on the incoming and outgoing mobility of the teaching staff	Erasmus statistika.xlsx	Erasmus statistika.xlsx
II - Description of the Study Field - 2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures		
Report on the implementation of the recommendations received both in the previous accreditation and in the licensing and/ or change assessment procedures and/ or the procedures for the inclusion of the study programme on the accreditation form of the study field.	Rekomendāciju izpildes pārskats_ENG_10.02.2022.pdf	Rekomendāciju izpildes pārskats_LV_10.02.2022.pdf
An application for the evaluation of the study field signed with a secure electronic signature	Application_Novikontas.edoc	Iesniegums_Novikontas.edoc
III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme		
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period		
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	atbilstība valsts izglītības standartam Meh.docx	
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	ENG_english_atbilstība profesijas standartam.pdf	ENG_lv_atbilstība profesijas standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme		
The curriculum of the study programme (for each type and form of the implementation of the study programme)		
Descriptions of the study courses/ modules		LAT Kugu mehāniku-studiju plans 10 June 2021.xlsx
Description of the organisation of the internship of the students (if applicable)		



III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

## Other annexes

Name of document	Document
3. Studiju programmu izstrāde, apsekošana un regulāra pārbaude.docx	3. Studiju programmu izstrāde, apsekošana un regulāra pārbaude.docx
3. Development, survey and regular inspection of study programs.docx	3. Development, survey and regular inspection of study programs.docx
6. Staff resources.docx	6. Staff resources.docx
6. Mācībspēki.docx	6. Mācībspēki.docx
Kvalitātes politika	Kvalitātes politika.pdf
Quality policy	Quality policy.pdf
NJK_Mehānika un metālapstrāde, siltumenerģētika, siltumtehnika un mašīnzinības akreditācija_18.12.2013.pdf	NJK_Mehānika un metālapstrāde, siltumenerģētika, siltumtehnika un mašīnzinības akreditācija_18.12.2013.pdf
Eksperta atzinums_NJK_Jūras transports_16.09.2019.pdf	Eksperta atzinums_NJK_Jūras transports_16.09.2019.pdf

# Maritime Transport (41525)

Study field	<i>Seafaring</i>
ProcedureStudyProgram.Name	<i>Maritime Transport</i>
Education classification code	<i>41525</i>
Type of the study programme	<i>First level professional higher education study programme</i>
Name of the study programme director	<i>Dmitrii</i>
Surname of the study programme director	<i>Sheliakov</i>
E-mail of the study programme director	<i>edu@novikontas.org</i>
Title of the study programme director	<i>Profesionālais maģistra grāds</i>
Phone of the study programme director	
Goal of the study programme	<i>To prepare competitive specialists for the labor market with the first level higher education in accordance with the Cabinet of Ministers Regulations No. 141 of March 20, 2001 "Regulations on the National Standard for First-Level Professional Higher Education" enabling to be qualified as officer on the watch, meeting the requirements of standard A-II / 1 of the STCW Convention Code and the reduced requirements of standard A-II / 2.</i>

Tasks of the study programme	<p><i>As a result of the study process, to prepare officers on the watch who are able to:</i></p> <ol style="list-style-type: none"> <li><i>1. plan the voyage, operate the ship and locate and verify the accuracy of the location by all appropriate means;</i></li> <li><i>2. Identify and take into account compass corrections;</i></li> <li><i>3. To forecast meteorological and oceanographic conditions;</i></li> <li><i>4. Carry out and ensure independent and safe navigational watch on ships;</i></li> <li><i>5. Ensure safe navigation using Radar and ARPA;</i></li> <li><i>6. Ensure safe navigation using ECDIS;</i></li> <li><i>7. Respond to distress signals at sea;</i></li> <li><i>8. Respond to emergency situations;</i></li> <li><i>9. Remotely control the main propulsion equipment and technical means and systems;</i></li> <li><i>10. To apply the standard maritime statements of the International Maritime Organization (hereinafter - IMO) and to use English in written and oral form;</i></li> <li><i>11. Transmit and receive information with a light signal. Transmit, receive and correctly interpret visual signals;</i></li> <li><i>12. Maneuver and steer the ship in all conditions;</i></li> <li><i>13. Supervise the loading, stowage, securing and unloading of cargo and ensure the necessary conditions for cargo during the voyage of the ship;</i></li> <li><i>14. Inspect cargo spaces, hatch covers and ballast tanks and report defects and damage;</i></li> <li><i>15. To transport dangerous goods;</i></li> <li><i>16. To ensure compliance with pollution prevention requirements;</i></li> <li><i>17. Maintain the seaworthiness of the ship;</i></li> <li><i>18. Prevent, control and fight fire on board;</i></li> <li><i>19. Use rescue equipment;</i></li> <li><i>20. Provide first aid on board;</i></li> <li><i>21. Monitor the fulfillment of legal requirements;</i></li> <li><i>22. Use leadership and management skills;</i></li> <li><i>23. Apply leadership and teamwork skills;</i></li> <li><i>24. Supervise the safety of personnel and the ship.</i></li> </ol>
Results of the study programme	<p><i>Upon completion of "Maritime Transport" programme, students must be able to:</i></p> <ul style="list-style-type: none"> <li><i>- maintain safe navigation of the vessel at the Operational Level;</i></li> <li><i>- carry out cargo handling and stowage at the Operational Level;</i></li> <li><i>- control the operation of the vessel and care for persons on board at the Operational Level;</i></li> <li><i>- carry out maritime communication by designated means at the Operational Level;</i></li> <li><i>- work effectively in a team and individually;</i></li> <li><i>- identify, formulate, analyze and solve issues of maritime industry within their competence.</i></li> </ul>
Final examination upon the completion of the study programme	<p><i>State final examination, a part of which is the defense of the qualification work.</i></p>

# Study programme forms

## Part time extramural studies - 3 years, 2 months - english

Study type and form	<i>Part time extramural studies</i>
Duration in full years	3
Duration in month	2
Language	<i>english</i>
Amount (CP)	119
Admission requirements (in English)	1) General or vocational secondary education; 2) Document confirming that English language proficiency is at least at B2 level; 3) Documents confirming professional qualifications and experience.
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Deck Officer</i>

## Places of implementation

Place name	City	Address
Novikontas Maritime College	RĪGA	DUNTES IELA 17, ZIEMEĻU RAJONS, RĪGA, LV-1005

## Full time studies - 3 years - english

Study type and form	<i>Full time studies</i>
Duration in full years	3
Duration in month	0
Language	<i>english</i>
Amount (CP)	119
Admission requirements (in English)	1) General or vocational secondary education; 2) Document confirming that English language proficiency is at least at B2 level.
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	<i>Deck Officer</i>

## Places of implementation

Place name	City	Address
Novikontas Maritime College	RĪGA	DUNTES IELA 17, ZIEMEĻU RAJONS, RĪGA, LV-1005

### **3.1. Indicators Describing the Study Programme**

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

The programme code of the study programme "Maritime Transport" was changed in 2019, as well as the study programme was included under the study field "Mechanics and Metal Processing, Heat Power Engineering, Heat Technology, and Mechanical Engineering", the changes were made because the study programme "Maritime Transport" was not under any study fields. The inclusion of the study programme "Maritime Transport" in the study field "Mechanics and Metal Processing, Heat Power Engineering, Heat Technology, and Mechanical Engineering" is logical, taking into account that it was already known in 2019 that in the future NMC will accredit two study programmes under one study field "Seafaring".

Taking into account that foreign students study at NMC, and in accordance with the requirements of Section 56, Paragraph Seven of the Law on Higher Education Institutions, a compulsory official language study course in the amount of at least 1 credit point was included in the study plan, thus NMC changed the study programme "Maritime Transport" credit points amount from 118 CP to 119 CP.

Within the evaluation procedure of the study field "Seafaring", a new type and form of study implementation will be added - full-time. Analyzing the college's activities in the last seven years, the dynamics of achieving the objectives set during the previous accreditation of the field of study, as well as taking into account students' and lecturers' opinions, it was decided to add new types and forms of study programme to develop research in College, increase number of student, develop exchange projects (including Erasmus+).

The duration of the full-time program is 3 years, which was calculated taking into account that the study program credit points amount is 119 CP and the Law on Higher Education Institutions stipulates that full-time studies are 40 CP per academic year and not less than 40 academic hours per week.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

NMC implements the first level higher professional education study program "Maritime Transport":

- program code - 41 525 (Study Program`s decipherment: 41 - first level professional higher education (fourth level professional qualification), to be implemented after obtaining general or vocational secondary education, duration of studies in full-time studies two to three years, 525 - Mechanical Engineering (Motor Vehicles, Ships and Aircraft));
- professional qualification - Deck Officer (the professional standard was approved in February 23, 2007 - link to Latvian version <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/ps0406.pdf>);
- credit points - 119 CP;
- duration of the implementation - 3 years (full time studies), 3 years and 2 months (part time extramural).

Admission requirements differ for full-time and part-time studies: persons with and without work experience at sea can apply for full-time studies (experience is not required), but only persons with a seagoing experience can apply for part-time studies. Proficiency in English shall be at least B2 level.

The study programme "Maritime Transport" fully corresponds to the study field "Seafaring". The aim of the study program is to prepare competitive specialists with first level professional higher education in accordance with the Regulations of the Cabinet of Ministers No. 141 "Regulations on the State Standard of First Level Professional Higher Education", which provides an opportunity to obtain a Deck Officer professional qualification and the qualification meets the requirements of standard A-II/1 of the STCW Convention Code and eased requirements of standard A-II/2. The aim of the study field is to prepare for the labor market competitive, qualified and responsible specialists in the maritime sector with first-level professional higher education, whose qualifications depend on the choosed study programme in accordance with the requirements of the STCW Convention.

The interconnection of the study programme parameters with the aim and results of the study programme is logical, the aim of the study programme absolutely corresponds to the name and qualification of the study programme.

The duration and number of the credit points of the study programme meet the requirements for obtaining a professional qualification. Within 3 years or 3 years and 2 months, students acquire a variety of competencies and skills:

1. Plan the voyage, navigate and locate the ship and verify the accuracy of the location by all appropriate means;
2. Identify and take into account compass corrections;
3. To forecast meteorological and oceanographic conditions;
4. To perform and ensure independent and safe navigational watch on ships;
5. Provide safe navigation using Radar and ARPA;
6. Ensure safe navigation using ECDIS;
7. Respond to distress signals at sea;
8. Respond to emergencies;
9. Remotely control the main drive equipment and technical means and systems;
10. Apply the standard maritime statements of the International Maritime Organization (hereinafter - IMO) and use English in written and oral form;
11. Transmit and receive information with a light signal. Transmit, receive and correctly interpret visual signals;
12. Maneuver and steer the vessel in all conditions;
13. Supervise the loading, stowage, securing and unloading of cargo and ensure the necessary conditions for cargo during the voyage;
14. Inspect cargo spaces, hatch covers and ballast tanks and report defects and damage;

15. To transport dangerous goods;
16. Ensure compliance with pollution prevention requirements;
17. Maintain the seaworthiness of the ship;
18. Prevent, control and fight fire on board;
19. Use rescue equipment;
20. Make first aid on board;
21. Monitor compliance with legal requirements;
22. Use leadership and management skills;
23. Apply leadership and teamwork skills;
24. Promote the safety of personnel and the ship.

Acquired skills and competencies enable the graduates to:

- maintain safe navigation of the vessel at the Operational Level;
- carry out cargo handling and stowage at the Operational Level;
- control the operation of the vessel and care for persons on board at the Operational Level;
- carry out maritime communication by designated means at the Operational Level;
- work effectively in a team and individually;
- identify, formulate, analyze and solve issues of maritime industry within their competence.

The amount of Credit Points of part time extramural and full time programs is equal - 119 CP. The duration of the implementation of the study is different:

- full-time - 3 years;
- part-time extramural - 3 years and 2 months.

In order to ensure that any person with or without experience in the maritime sector can acquire the skills and competencies required for the qualification of a Deck Officer, and that the objectives, tasks and intended results of the program are achieved, the scope of the program is national standard of education. According to the requirements of the STCW Convention and the regulations of the Cabinet of Ministers No. 895 "Regulations Regarding Certification of Seafarers", in order to receive a NMC diploma for obtaining the study program and the Certificate of Competency of Officer in charge of a navigational watch issued in the Registry of Seamen, a mandatory 12-month seagoing practice must be completed, the study process is dynamic, each study year of the study plan includes sea practice. Sea practice ensures the implementation of work-based learning, acquisition of study courses ensures successful achievement of study results.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Today the maritime industry plays an important role in the global economy, cargo shipping is used to import and export various types of cargo. It's already been proven and calculated that the ships are relatively the cheapest transport for cargo transportation, which makes freight shipping by vessels a more in-demand service. Freight shipping is not possible without the ship's crew, who took care of the day-to-day delivery of the cargo from port A to port B. Most of Latvia's 12,000 active seafarers work for foreign companies, bringing 300 million euros to the Latvian economy each year.

At the beginning of 2021, 11,760 active seafarers were registered in Latvia, of which 5,704 were officers and 5,083 were ratings. The new report highlights a current shortfall of 26,240 STCW certified officers, indicating that demand for seafarers in 2021 has outpaced supply. Therefore,



there is no employment problem for graduates of the NMC first level higher professional education programmes “Marine Engineer” and “Maritime Transport”.

The number of NMC graduates is 49, 32 of them have obtained the qualification "Deck Officer". By December 1, 2021, 31 graduates of Study Programme "Maritime Transport" continue to work in the maritime industry, 1 graduate has changed industry and does not plan to return to work at sea in the future.

**3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The number of enrolled students in the study program “Maritime Transport” decreased ~ 2 times. It is challenging to define the objective reason why this happened, but one of the influencing factors may be that the maritime sector is not popular in the secondary school environment. NMC actively participates in exhibitions (eg SKOLA), events and competitions (Ēnu diena, Enkurs), currently Latvian Maritime Education and Research Development Fund organizes innovation competitions for students and high school students, supported to popularize the industry.

Since the accreditation of the study field in 2013 and until February 1, 2022, the number of NMC graduates is 49 (1 person has graduated in the study year 2021/2022, but taking into account that the study year has not been completed yet, the study year 2021/2022 data are not used for this statistics), 32 out of 48 graduates have completed the "Maritime Transport" program. The number of graduates in the 2020/2021 academic year is the lowest indicator in the reporting period related to the spread of Covid-19 virus. The spread of the Covid-19 virus adversely affected and continues to affect the crew changes on board, students were delayed from sea practice, then had to wait for students to complete the vaccination course, and there were periods when studies were held completely remotely and contact hours / consultations were canceled and postponed.

NMC constantly monitors the progress of students, the director of the study program and the head of the study department maintains regular communication with the students, and if the student is inactive, does not want to continue studies or has other personal reasons, the director of the study program compiles and maintains a list which transfer to the study department to complete the exmatriculation process. Due to the fact that students are working seafarers and may be at sea once or more per year, it is not always possible to contact them, so the number of students dropped varies from year to year and there is no set dynamics.

Since the accreditation of the study field in 2013 until now, NMC has implemented only a part-time extramural program in English, thus the distribution of statistical data in different study forms and languages is useless.

Statistics on students during the reporting period are available in the annex.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## 3.2. The Content of Studies and Implementation Thereof

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The content of the study program is developed and complies with the following regulatory enactments:

- STCW Convention - the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (as amended);
- Regulations of the Cabinet of Ministers No. 895 - Regulations for the Certification of Seafarers;
- Regulations of the Cabinet of Ministers No. 710 - Regulations for the Certification, Implementation and Supervision of Seafarers' Vocational Training Programs;
- Directive 2008/106 / EC of the European Parliament and of the Council of 19 November 2008 on the minimum level of training of seafarers;
- Directive 2012/35 / EU of the European Parliament and of the Council of 21 November 2012 amending Directive 2008/106 / EC on the minimum level of training of seafarers Text with EEA relevance;
- Seafarers' Register standard programs;
- Seafarers' training courses developed by the International Maritime Organization (IMO model course);
- Instructions of the Register of Seamen;
- Professional standard - 2.49. Standard for the profession of pilot (operational level);
- Regulations of the Cabinet of Ministers No. 460 - Regulations on the List of Specialties, Subspecialties and Additional Specialties for Regulated Professions.

These documents state that the certification of seafarers must be in accordance with the STCW Convention and Code. The requirements of the STCW Convention state. The professional competencies and competencies required for a ship's operator (at the operational level) are specified in the STCW Convention Standard of Competence A-II/1 - "Specification of the Minimum Standard of Competence for Navigating Officers on Ships of 500 GT or more". Other documents according to STCW are shown as follows:

MK.895 states:

- Certification of the personnel of a seagoing ship (hereinafter in this Part - a ship) in the Republic of Latvia shall be performed in accordance with the requirements of the STCW

Convention and these Regulations.

MK.710 states:

- The educational institution or training center shall observe in its activities, as well as in the development and implementation of the program:

6.1. STCW Convention;

6.2. A model course for the training of seafarers developed by the International Maritime Organization (hereinafter - the IMO model course);

6.3. a standard program, if one has been developed;

6.4. Instructions from the Register of Seafarers;

6.5. regulatory enactments regulating the field of maritime affairs and education.

Directive 2008/106 / EC of the European Parliament and of the Council states:

- Member States shall take all necessary measures to ensure that seafarers serving on ships referred to in Article 2 are trained at least in accordance with the requirements of the STCW Convention, as set out in Annex I to this Directive, and have certificates as set out in Article 4, or appropriate certificates as provided for in Article 1 (27).

Professional standard - 2.49. The pilot-in-command (at operational level) states:

- The master of a ship (at the operational level) may work on ships flying the flag of Latvia or other countries in international navigation, provided that his professional competencies are recognized as compliant with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW). of Training Certification and Watchkeeping) Convention.

After all the above, we can conclude that the interconnection between all the mentioned documents with which the NMC study programs correspond has been proved.

Requirements of applicable standards to which the study program meets:

Standard	Profession description and requirements
Regulations of the Cabinet of Ministers No. 895	41.7. officer in charge of a navigational watch on ships of 500 gross tonnage or more shall be entitled to serve as officer in charge of a navigational watch on ships of any gross tonnage without any restrictions on the navigational area. The gross tonnage of the ship may be limited in accordance with the acquired vocational training program;
Standard of competence of the STCW Convention A-II / 1	Minimum standard of competence for officers in charge of a navigational watch on ships of 500 gross tonnage or more
Directive 2008/106 / EC of the European Parliament and of the Council of 19 November 2008 on the minimum level of training of seafarers;	Minimum requirements for certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more
Directive 2012/35 / EU of the European Parliament and of the Council of 21 November 2012	Minimum requirements for certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more

II. Occupational standards for the fourth level of professional qualification	2.49. Standard for the profession of pilot (operational level)
Regulations of the Cabinet of Ministers No.460	Deck Officer on merchant ships

NMC is regularly audited in accordance with these standards, the supervisory authority is the Maritime Administration of Latvia - Registry of Seamen, the compliance of which is also regularly audited by the European Maritime Safety Agency (EMSA) on behalf of the European Commission. In addition, to ensure this compliance, NMC has established close cooperation with many maritime companies with which it is regularly communicated and received feedback. NMC employs full-time trainers and regularly recruits trainers from the labor market, active masters or chief engineers mechanics, who provide information on the latest maritime trends.

The goal of the study program "Maritime Transport" is to prepare specialists who are competitive in the labor market with first-level professional higher education in accordance with the Cabinet of Ministers Regulations No. 141 of March 20, 2001 "Regulations on the State Standard of First-Level Professional Higher Education". Professional qualification of a shipowner meeting the requirements of standard A-II/1 of the STCW Convention Code and relaxed requirements of standard A-II/2. In turn, the goals and results set in the descriptions of study courses are closely related to the goal and results of the study program.

The processes of development and review of study programs are regulated by the NMC QMS procedure "Development, Inspection and Regular Inspection of Study Programs". An internal audit is carried out every year in accordance with the schedule in order to continuously check the content of the study program and study courses for compliance with the industry, labor market needs and scientific trends. If deficiencies / inconsistencies are identified during the audit, the director of the study program draws up a plan for how the content will be updated and agrees with the QMS specialist.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable

**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

NMC runs programmes in English.

Novikontas has started to implement Student Centered Learning (SCL) since the first design and development and first accreditation of educational programs, e.g. since year 2013/2014.

Novikontas is highly focused on all the aspects, that the student's voice is heard and student can highly affect the educational process.

The most important principles implemented by NMC:

- Required active learning and reflective. All the students shall be active during the educational process, that is why we use plenty of practical exercises to engage the student and to make him/her reflect on the competences s/he gains.
- Does not have one static approach for all students. The program and teaching/learning activities states the learning outcomes, which shall be reached by the students, but how that outcomes will be reached, by what learning methods, what media to use for that – in most cases decided by the student/s.
- NMC recognizes student's diversity.
- Students have different experience, background, knowledge, skills. That is why student can decide not only on the way how s/he performs learning activities, but also which study modules in which sequence will be followed. Does s/he take complicated modules/learning activities first or simple ones. So the way of learning path is highly determined by student.
- Students need to have a choice and control over learning. Same as above. Any student gets access to the entire term of the study program and adjusts his/her own way to gain all the required competences.
- Learning needs cooperation between student and lecturer. There is quite close cooperation between them: a) Lecturer states the vector, student reach it in his/her own way and reflects on the new competences. b) Student needs assistance, lecturer provides the assistance in different methods: face-to-face, digital video, digital audio, email, chats, etc. c) All the lecturers are former or active seafarers, most of them served in Master's of Chief Engineer rank, so cooperation is highly relevant to real working conditions on ships.
- Learning needs cooperation between student and maritime professionals. Novikontas has established the study process in the way, when the student has much time for direct access to Maritime Officers. As example, on the part-time studies, students have 80% of all the studies on board ships; when full time students have minimum 45% of all the studies on board ships. Communication and learning from real professionals, when each of them has his/her own experience, which is transferred to students during the studies – highly improves the quality of the educational program.
- NMC conducts a students` survey, a student can influence his / her study process by providing feedback to the college. The opinion of students is taken into account for the improvement of the content of the study programme;
- NMC ensures access to education and personalization of studies by integrating modern teaching methods, innovations, actively digitizing the study process, providing informative and material support for students;
- NMC ensures the availability of information, incl. placing internal normative documents, study course descriptions and methodological materials - "Novis";
- NMC ensures the recognition and equivalence of previous education and practical experience;

- NMC integrates in the study process trainings with simulators, practice, bringing the study process closer to the real situation at sea.

The study programme and study course implementation methods are chosen to achieve the planned results of the study course, about which students can find information in "Novis".

The implementation of the study programme is dynamic, creative and diverse, using different methods:

- 1) lectures and contact hours / consultations - to acquaint students with information that is not available in a sufficient amount of study literature, as well as study courses in which independent acquisition of study materials is difficult;
- 2) independent work - for students to independently read the necessary sources, analyze them;
- 3) discussions - is used in study courses, where simultaneously with the acquisition of theoretical knowledge, communicative and argumentation skills are also developed;
- 4) work in small groups with simulators - to learn to work in a team, as well as to improve communication skills;
- 5) practical classes / laboratory works - to help to apply the acquired theoretical knowledge in practice;
- 6) practice - in order to acquire and develop practical work skills by getting acquainted with the specifics of work in the maritime sector;
- 7) e-learning in the "Novis" system - taking into account that students can continue to study the program while they are at sea, e-learning is provided to improve communication between academic staff and students, in each study course consultations are held in the "Novis", students receive , performs and submits works in the "Novis", the academic staff checks and evaluates the works in the e-platform.

For the implementation of the study programme and study courses, NMC uses the digital environment "Novis", which is created on the "Canvas" platform. "Novis" provides information about teaching staff, study courses, college news, internship vacancies, information about study progress, etc. "Novis" is used by students, academic staff, directors of study programmes and the head of the study department.

There are significant differences in the implementation of full time and part time studies - the full-time program consists of 70% contact hours, the part-time program - 32%. The implementation methods of study courses are the same.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

In order to obtain a seafarer's professional qualification, a seafarer's professional training program must be completed in accordance with the STCW Convention. The regulatory enactments also specify the theoretical knowledge and practical skills required for each seafarer's professional qualification, the duration of the seagoing service, as well as the fact that the seagoing service must be documented in the training record book. The study programme includes mandatory 12-month sea going practice. The number of credit points for practice is 52 CP.

Upon commencement of studies, students are informed that the internship program will be completed only if the internship is completed as part of a crew on a merchant fleet vessels of 500 GT or more during which they have completed at least 6 months of navigational watchkeeping under the supervision of a master or a qualified officer in charge of a navigational watch. .

Prior to the internship, students receive a Training Record Book for Deck Officers (cadets) from the Study Department and are informed that there must be a tripartite internship agreement, without the agreement and the record book - the internship is not counted.

The internship program is based on the content of the seagoing record book. The internship program is available to students on the Novis platform.

NMC provides and assists students with internships.

The largest maritime companies in the world and in Latvia actively cooperate with the Novikontas Maritime College, which are likely to offer internships to NJK students:

Anglo-Eastern / GB / , Anthony Veder Rederijzaken / NL / , Arklow Shipping Ltd / IE / , Atlas Services Group Latvia / LV / , Atlas Services Group Marine / NL / , Atlas Services Group Merchant / NL / , Bank / LV / , BCI Ltd / GB / , Berg Maritime Management Ltd / IE / , Bernhard Schulte SHM / IM / , Bernhard Schulte SHM / SG / , BIMS / LV / , BMGS / LV / , Boskalis Baltic / LT / , Brovigtank / NO / , BSM CSC / LV / , Buto Yacht / LV / , Candina Baltica / LV / , Chemtrans Crewmanagement / DE / , Clyde Marine Recruitment / LV / , Columbia SHM / CY / , Columbia SHM / DE / , Crew Chart Ship Management / SE / , Crystalwater / NL / , Deep Sea Management / AE / , Delta Transit / LV / , Det Norske Veritas Latvia / EE / , Det Norske Veritas OY / FI / , Det Norske Veritas Sweden / SE / , DS Crewing / DE / , Eco Port / LV / , Entra Agency / LV / , Essberger Crewing Services / DE / , Euroceanica (UK) Ltd / GB / , Expromo Agency / LV / , Fast Bunkering / LV / , Gulf Offshore NS Limited / GB / , Harren & Partner / DE / , Hoegh LNG Fleet Management / NO / , IMTS Ltd / GB / , INC Latvia / LV / , Intership Ltd / VC / , Marine Finance / LV / , Maritime Service Company / LV / , JV Maritime Consulting / LV / , Page Ltd / LV / , Limetree Shipping Company Ltd / MT / , Lowland International / LV / , Lowland Marine & Offshore / NL / , Lowland Nederland / NL / , LR VR Ventspils Board / LV / , LSC Shipmanagement / LV / , Maersk / IN / , Maestro SHM Ltd / CY / , Mansel Ltd / BM / , Marine Management Limited / BZ / , Mega Chemicals Schifffahrt / CH / , Mideast Ship Management Limited JLT / AE / , MRM Holdings / MY / , N Stars / LV / , NMMS Ltd / GB / , Norbulk Shipping / GB / , Nordic Tankers Marine / LV / , Norwegian Crew M / NO / , Orion & Ko / LV / , ORLEN Lithuania / LT / , OSM Crew M INC / NO / , OSM Crew M Ltd / CY / , PKL Fleet / LV / , RJ & L.Mitchelmore / GB / , Freeport of Riga Fleet / LV / , Freeport of Riga Authority / LV / , Riga Sea Supply / LV / , Roko Marine Service / LV / , Sailinga / LT / , Salacgriva Navigation INC / MH / , Saldus Navigation INC / MH / , Sanco Holding / NO / , Saulkrasti Navigation INC / MH / , Sechste Buettner / DE / , Selandia Crew Management / LV / , Sigulda Navigation INC / MH / , Skrunda Navigation INC / MH / , SP Management / LV / , Straupe Navigation INC / MH / , Subsea 7 Limited / GB / , Tallink Latvia / LV / , Techno Electronics / LV / , Tsakos Columbia SHM / EL / , UAB Boskalis Baltic branch / LV / , UEG / LV / , Ultramarin / LV / , Uni-Tankers / DK / , Ventspils Freeport Authority / LV / , Voyaing Group Ltd / MH / , Vroon Offshore Services Limited / GB / , Vroon SHM / NL / , VShips UK Ltd / GB / , Wappen Bayern / DE / , Wappen Bayern / DE / , Wappen Flensburg / DE / , Wappen Frankfurt / DE / , Wappen Hamburg / DE / , Wappen Leipzig / DE / , Wappen Munich / DE / , Wappen Nuremberg / DE / , Wappen Riga / LV / , Wappen Stuttgart / DE / , Welton Enterprises / EE / , Wisby SHM / SE / , WLCM - RHL Conscientia (DE),

Zodiac MA Ltd (GB).

NMC runs study programmes in English. Due to the specifics of the maritime industry and the fact that the official working language of the maritime industry is English, all internships are conducted in English, as all documentation as well as on-board communication is in English.

The objectives and results of the internship are closely linked to the skills and competences specified in the professional standard and the STCW Convention.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

NMC is currently changing the concept of qualification work topics, offering students the freedom to choose a topic / problem for research, arguing the relevance of the qualification work topic in the maritime field. Until now, the qualification work has been divided into 2 parts: Part 1 - organization, calculation and implementation of cargo shipping from port A to port B, Part 2 - additional topic according to the approved list of sample topics.

The Qualification Thesis Defense Commission always consists of 5 people, 3 of whom are representatives of the industry and employers.

Examples of qualification topics chosen by students in the last four years:

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#### Topics of the final theses of the students

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##### *Study Programme "Maritime Transport"*

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Cyber Security onboard ships

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Planning, execution and evaluation of General cargo ship "Adriata" voyage from Amsterdam, Netherlands to Silamae, Estonia port with wood chips. With additional topic - Mixed crew

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Ballast Water Treatment Systems

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Ship Energy Efficiency

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Planning, execution and evaluation of oil/chemical tanker "Ugale" voyage from Amsterdam, Netherlands to Tema, Ghana with unleaded gasoline cargo. With additional topic: Vetting Inspection

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#### Topics of the final theses of the students



### Study programme "Marine Engineer"

SOx Scrubber system

Marine incinerator

Sewage Treatment Plant

Fuel Oil and all associated machineries, systems and equipment on board the ship

Compressed air systems at the operational level during the watch

The topics are different, but as is seen, all topics are related to either the systems / equipment on board or the crew, such as crew safety, mixed crew. The topics of the students' final theses indicate that the students' research interest was related to the field of the maritime industry, which fully corresponds to the goals of the study programs and the planned results to be achieved.

Evaluations of qualification works in the last four years:

Evaluations of qualification works of the Study Programme "Maritime Transport"								
Year	Evaluation of qualification works							Average mark
	4	5	6	7	8	9	10	
2018	0	0	3	3	4	2	0	7,4
2019	0	0	1	1	2	2	0	7,8
2020	0	0	0	3	1	0	0	7,25
2021	0	0	1	2	0	1	0	7,25

Evaluations of qualification works of the Study Programme "Marine Engineer"								
Year	Evaluations of qualification works							Average mark
	4	5	6	7	8	9	10	
2018	0	0	1	0	2	2	4	8,9
2019	0	0	0	0	0	0	3	10

2020	0	0	0	1	1	1	1	8,5
2021	-	-	-	-	-	-	-	-

Evaluations of qualification works in the reporting period are at a good level, lower mark - 6 (almost good), highest mark - 10 (with distinction), which indicates the stability and quality of study programmes.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Study programs are implemented at Dantes Street 17a and Dantes Street 17d. NJK is located on 2 floors, and next to the college building is the NJK swimming pool building - the only swimming pool building of its kind in the Baltics, as well as one of the most modern maritime rescue simulation swimming pool buildings in Europe. , thunderstorms, lightning and thunderstorms, as well as various preset scenarios with a total area of 1415.19 m<sup>2</sup>

- 212.4 m<sup>2</sup> Safety course simulator room (swimming pool with weather simulation);
- 119.0 m<sup>2</sup> Fire fighting simulator rooms;
- 29.76 m<sup>2</sup> Welding Laboratory;
- 29.76 m<sup>2</sup> OWS laboratory;
- 29.76 m<sup>2</sup> Electrical and Hydraulic Laboratory;
- 34 m<sup>2</sup> High Voltage Laboratory;
- 1009.9 m<sup>2</sup> Dantes Street 17A study rooms.

NMC has in property area of 2879 m<sup>2</sup>. NJK is equipped and modernized with 1 computer classroom, 24 classrooms, various types of laboratories (4 - Full mission bridges, 7 - Small navigation bridges, 7 - Engine room simulators, 8 - Liquid cargo control room simulators, work aloft simulator, etc.) with 12 workstations and 3 administrative premises. Computers are used in the study process for students' individual and scientific work. All NMC computers are connected to the NMC Intranet network, as well as Internet access is provided.

The study department (the department responsible for the implementation of the study programme) has at its disposal the auditoriums (equipped with the necessary TV, audio, video, computer equipment), as well as the technical equipment necessary to ensure the study process according to specialization (L3 - liquid cargo simulator, TRANSAS simulators - navigation bridges with a Dynamic Positioning module, a lifeboat (up to 8 m in length, equipped with an internal diesel engine and a complete set of oars, complying with the requirements of section IV, paragraph 4.4 of the LSA Code) and a boat crane of suitable construction that the boat can be launched freely; up to 8.5 meters in length, equipped with an outboard motor and a complete set of oars, comply with the

requirements of section V, paragraph 5.1, of the LSA Code) and a boat crane of adequate construction so that the boat can be lowered freely; life raft and launching crane; life jackets, wetsuits, thermal protection aids for learners and instructors; 2 - channel VHF portable life-saving appliances; the pyrotechnic kit available in the lifeboat; 406 MHz emergency position indication radio buoy EPIRB (mock-up); 9 GHz search and rescue radar transponder SART (layout); a full set of lifeboat equipment; a full set of life raft equipment; human-sized manikin for resuscitation exercises; first aid kit: stretcher, first aid kit, breathing apparatus; Neil-Robertson stretcher, equipped swimming pool for training; quality management system QMS, training process management system TMS, Novikonta database, etc.).

Material resources required for the implementation of the programme:

Nr.	List of the equipment	
1.	ROOM EQUIPMENT	
1.1.	Classrooms / auditoriums equipped with projectors and multimedia equipment.	
1.2.	Computer class with 10 computer seats in total	
2.	TECHNOLOGICAL EQUIPMENT AND WORK TOOLS	Quantity
2.2.	Tools for Deck Officer	20
2.3.	Star charts	cards can be printed (unlimited in quantity)
2.4.	Integrated ship bridge simulator	6
2.5.	ECDIS simulator	18
2.6.	RADAR or ARPA simulator	18
2.7.	Ship power plant model	12

2.8.	Liquid cargo handling Simulator	12
2.10	Floating ship stability model	3
2.11	Fire Fighting Simulator	1
2.12	Swimming Pool	1
2.13	Lifejackets	40
2.14	Wetsuits	42
2.15	Lifebuoys	2
2.16	Inflatable liferaft in a container with a hydrostatic release device	3
2.17	First aid kit: stretcher, first aid kit, breathing apparatus	4
2.18	Neila-Robertsona nestuves izmantošanai apmācībā	1
2.19	A lifeboat (up to 8 m in length, equipped with an internal diesel engine and a complete set of oars, shall comply with the requirements of section IV, paragraph 4.4, of the LSA Code) and a boat crane of adequate construction so that the boat can be lowered freely. For 28 people.	1
2.20	A lifeboat (3.8 to 8.5 meters long, equipped with an outboard engine and a complete set of oars, shall comply with the requirements of section V, paragraph 5.1, of the LSA Code) and a boat crane of adequate construction so that the boat can be launched freely.	2

2.21	Inflatable liferaft in a container with a hydrostatic release device	1
2.22	A liferaft and a launching crane	1
2.23	2 - Canal VHF portable life-saving appliances	2
2.24	Pyrotechnic kit available in the lifeboat	2
2.25	406 MHz emergency position indication radio buoy EPIRB	2
2.26	9 GHz search and rescue radar transponder SART (layout)	2
2.27	Full lifeboat equipment set	1
2.28	Full lifeboat equipment set	2
2.29	Human - sized mannequins for resuscitation exercise	2
2.30	Firefighting equipment set	12
2.31	Fire extinguishers	24
2.32	Smoke generator	1
2.33	Magnetic compass	2
2.34	Sextant	2
2.35	The globe of the stars	1
2.36	Gas analyzers	3
2.37	Equipped swimming pool	1

3.	MATERIALS	
3.1.	Nautical navigational charts at different scales	cards can be printed (unlimited in quantity)
3.2.	Navigation publications	28
3.3.	Catalog of navigation charts	3
3.4.	Notices for seafarers	cards can be printed (unlimited in quantity)
3.5.	Astronomical yearbook	10
3.6.	Navigation tables	cards can be printed (unlimited in quantity)
3.7.	Distance tables	can be printed (unlimited in quantity)
3.8.	Stream tables	can be printed (unlimited in quantity)
3.9.	Tide tables	can be printed (unlimited in quantity)
3.10.	Logbooks	5

3.11.	Photographs, diagrams, plans illustrating the different types of ship and their construction	10
3.14.	Video film	100
3.15.	Color catalogs	5
3.16	Cargo plan samples	cards can be printed (unlimited in quantity)
3.17.	Cargo plan calculation computer programs	3

Students have the opportunity to use the digital study platform "Novis". "Novis" provides an excellent opportunity to retain the information needed to organize effective study courses. It is possible to download from the interactive system (Novis) information no matter where the student is, exchange materials with teachers and receive advice on issues of interest. "Novis" allows to follow the progress of students' studies, look at the student's marks, activity in taking study courses, fulfilling independent tasks.

The NJK database provides students with access to study and scientific literature in electronic format in all study courses, which facilitates studies and provides students with easy access to study materials, even on board, which is especially relevant for part-time students.

On the basis of cooperation agreements, NMC students have the opportunity to use the resources of RTU Olaine College of Technology and Riga Technical College (RTK) for the acquisition of study programmes, including the library, as well as NMC is allowed to use 40 m2 of Freeport of Riga area for the providing practical trainings.

NMC students and lecturers are have academic freedom to use all the possibilities of NMC infrastructure and material and technical provision. The available resources and provision meet the conditions for the implementation of the study programme and promote the achievement of study results.

The list of all the study equipment and facilities, informational resources makes evident, that Novikontas Maritime College has quite enhanced combination of all the resources, what makes it one of the most advanced maritime educational institution in Europe.

All this equipment has been purchased and implemented based on the:

- Minimum STCW Convention and Code requirements
- IMO (International Maritime Organizations) recommendations stated within Model Courses
- Working Specifics and Environment on ships
- Best practices of Maritime Higher Educational Institutions all over the world.

Every piece of technical, informational and digital recourse make qualitative contribution to reach all the objectives of the study program.

Examples:

1. Full mission Bridge Simulators provides students with the competence "To carry out navigational watch"
2. Liquid Cargo Simulators provides students with "To carry out cargo watch"
- 3.

**3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

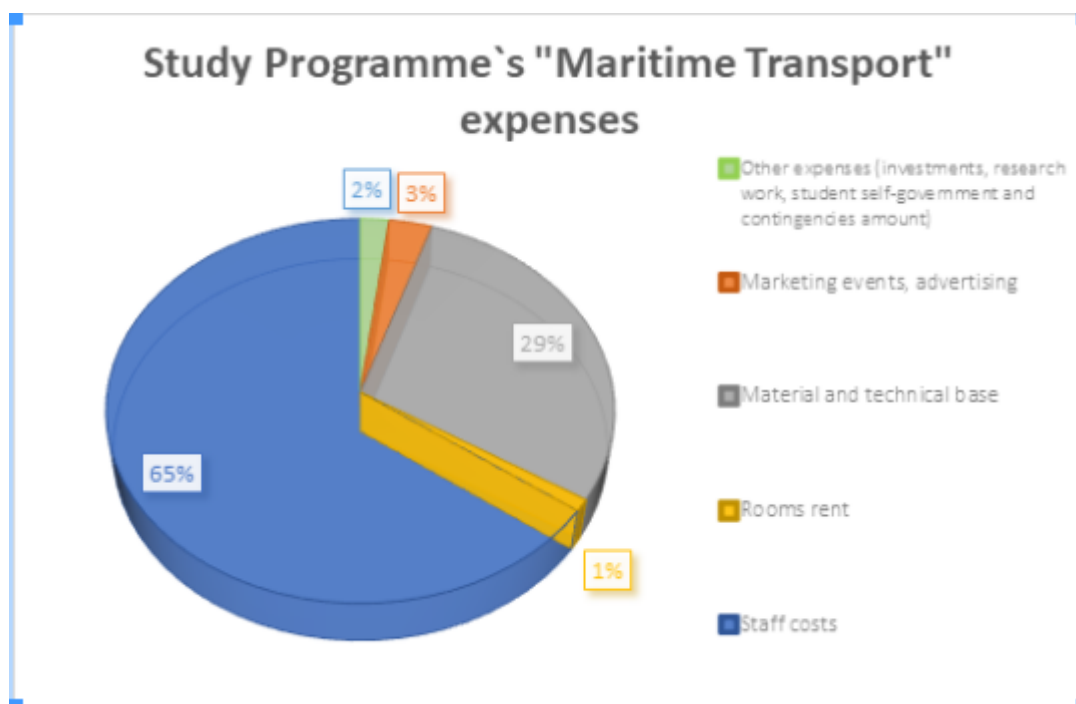
The NMC sources of funding are specified in Article 58 of the NJK Regulations that the college is financed by its founder, observing the minimum costs of the implementation of educational programmes per student set by the Cabinet of Ministers. The highest governing body and decision-making body of the college in strategic, financial and economic matters is the Founder.

Taking into account that "Novikontas Maritime College" is a private college, its main source of funding is income from economic activities, as well as Erasmus + program funding, which supports the mobility of academic and non-academic staff (professional development, participation in scientific conferences, personal development, promotion of cooperation projects). NMC provides funding for science researches through its own resources as well as external funding.

The tuition fee for 1 study year for students is approved by the ordinance of the College Director or Deputy Director every year until January 15. The student can pay splitting the payment (the maximum tuition fee can be divided into three parts) or for the entire study year in accordance with the study agreement. If a student pays for the entire study programme in one payment at the beginning of the studies, then they are not subject to inflation, etc. tuition fee changes. The tuition fee includes all the necessary study materials and all the necessary courses in order to receive a seafarers' certificate of competence in the Register of Seamen of Latvian.

The costs of NMC programs mainly consist of staff costs and material and technical base expenses. Ensuring an increase in the number of students is one of the parts of NMC's strategy for quality studies, therefore the set of marketing and sales expenses is considered to be appropriate. Other expenses includes research, investment, student self-government and contingency amount.





Below is a detailed description of the expenses for the study programme "Maritime Transport" (part-time, full-time both):

Expenses		
	EUR	Izdevumi %
<b>1. Staff costs</b>	3839 €	65,29%
<i>1.1. Administrative staff costs</i>	566 €	9,63%
1.1.1. Salaries of administrative staff	458 €	7,79%
1.1.2. The employer's social tax	108 €	1,84%
<i>1.2. Academic staff costs</i>	3273 €	55,66%
1.2.1. Salaries of administrative staff	2618	44,52%
1.2.2. The employer's social tax	655 €	11,14%
<b>2. Rooms rent</b>	34 €	0,58%
<b>3. Material and technical base</b>	1730 €	29,42%

3.1. Methodical materials	10 €	0,17%
3.2. Materials for practical work	15 €	0,26%
3.3. Diplomas and other document	5 €	0,09%
3.4. Expenses related to the organization of the examination	128 €	2,18%
3.5. Improvement of material and technical base	120 €	2,04%
3.6. Certificates for work at sea	1452 €	24,69%
<b>4. Marketing events, advertising</b>	159 €	2,70%
<b>5. Other expenses (investments, research work, student self-government and contingencies amount)</b>	118 €	2,01%
Total expenses for one student for the whole study programme	<b>5880 €</b>	<b>100,00%</b>

Study fee for part-time and full-time students is the same - 1960 EUR per year.

The minimum number of students in the study programme in order to ensure the profitability of the study programme (part-time, full-time) at the same time - 50 people.

The minimum number of students in one study year to ensure the profitability of the study program is 15 people.

## 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

In order to ensure the quality of implementation of the study programme, the teaching staff involved in the implementation of the study program is supplementing their professional knowledge in seminars, conferences, participating in various projects and research work, as well as obtains special training every 5 years. Information on the in-service training program is available in 2.3.6. point.

The teaching staff involved in the implementation of the study program has a qualification in accordance with the specifics of the study program, the requirements of regulatory enactments and the regulations on academic and administrative positions in NMC, thus ensuring the achievement of the set results of the study programme, implementation of NMC goals and tasks. The qualifications of the teaching staff of the professional field comply with the requirements of the STCW Convention, the study courses of the professional field are implemented by experienced and professional academic staff and representatives of the field.

22 representatives of the academic staff are involved in the implementation of the study programme courses that make up 111 CP out of 119 CP, including qualification sea practice, which makes up 93.3% of the total study programme. 8 CP out of 119 CP - is a state final examination, which consists of 1) state final examination in maritime English, 2) defense of a qualification work and 3) complex examination in the specialty.

#### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The changes to the composition of the teaching staff 2014 - 2021:

<b>Year</b>	<b>Number of Doccents</b>	<b>Number of Lecturers</b>	<b>Number of guest lecturers</b>
2014	5	6	10
2015	5	8	12
2016	5	9	9
2017	2	11	11
2018	2	10	11
2019	2	10	12
2020	2	10	12
2021 (01.02.2022)	3	7	12

If we compare the number of teaching staff involved in the study programme during the period of opening the study field (2013/2014 academic year) with the data of 01.02.2022, it can be seen that the number of teaching staff has increased.

The teaching staff consists of 2 guest lecturer with a doctoral degree, at least 2 lecturers are

currently studying in the doctoral study programme. Professional study courses are taught by guest lecturers and lecturers with a master 's degree and professional experience in the field corresponding to the study course.

Since 2014, the quality of studies has significantly increased because of experienced and professional academic staff.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The mutual cooperation of the teaching staff is formed in individual negotiations with the directors of the study programs, in the discussions between the lecturers, in the meetings of the NMC lecturers on news and current events in the higher education and professional fields, the lecturers from one and / or two programs are involved together in projects and research. The internal audit of the study courses is carried out every year, in case of shortcomings or inconsistencies in the content, the study director engage teaching staff who, within the framework of mutual cooperation, provide consultations to the study director on updating the content of the study courses.

At the time of submitting the self-assessment report, the ratio of the number of students and teaching staff within the study programme is 210 to 19, which is 11.1.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	Diploma.zip	Diploms.zip
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	Statistika par studējošajiem pārskata periodā.pdf	Statistika par studējošajiem pārskata periodā.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	NAV_Compliance with the study programme with the State Education Standar...pdf	NAV_Studiju programmas atbilstība valsts izglītības standartam.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	NAV-english_compliance with the professional standard.pdf	NAV-lv- atbilstība profesijas standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Jūras transports studiju programmas atbilstība atbilstošās nozares specifiskajam normatīvajam regulējumam-ENG.pdf	Jūras transports studiju programmas atbilstība atbilstošās nozares specifiskajam normatīvajam regulējumam-LV.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	NAV_ENGLISH-Studiju kursu kartējums.pdf	NAV_LV_Studiju kursu kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	Study Programme`s Maritime Transport curriculums.zip	Studiju programmas Jūras transports plāni.zip
Descriptions of the study courses/ modules	Descriptions of the study courses of Study Programme Maritime Transport.zip	Studiju programmas Jūras transports studiju kursu apraksti.zip
Description of the organisation of the internship of the students (if applicable)	10. Organization of practice.docx	10. Prakses organizēšanas kārtība.docx
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

# Marine Engineer (41525)

Study field	<i>Seafaring</i>
ProcedureStudyProgram.Name	<i>Marine Engineer</i>
Education classification code	<i>41525</i>
Type of the study programme	<i>First level professional higher education study programme</i>
Name of the study programme director	<i>Valters</i>
Surname of the study programme director	<i>Šteins</i>
E-mail of the study programme director	<i>vast@novikontas.org</i>
Title of the study programme director	<i>Profesionālais bakalaura grāds jūras transportā</i>
Phone of the study programme director	
Goal of the study programme	<i>To prepare competitive specialists for the labor market with first level professional higher education in accordance with the Regulations of the Cabinet of Ministers No. 141 of March 20, 2001 "Regulations on the National Standard for First-Level Professional Higher Education" enabling to be qualified as Marine Engineer meeting the requirements of standard A-III/1 of the STCW Convention code and reduced standard A-III/2.</i>

Tasks of the study programme	<p>As a result of the study process, to prepare Officer in charge of an engineering watch on ships powered by main propulsion machinery of 750 kW propulsion power or more whose practical and theoretical skills meet the requirements of standard A-III / 1 of the STCW Convention Code and reduced requirements of standard A-III / 2, provide full technical and theoretical support for the acquisition, development and strengthening of skills. It is expected that as a result of studies competitive specialists will be prepared. To prepare Engineer officers with the following competencies:</p> <ol style="list-style-type: none"> <li>1. safe performing of the engine-room watchkeeping duties;</li> <li>2. written and oral use of English;</li> <li>3. use of internal communication systems;</li> <li>4. operation of main propulsion machinery and auxiliary machinery and associated control systems;</li> <li>5. operation of fuel, lubrication, ballast and other pumping systems and associated control systems;</li> <li>6. operation of electrical systems, electronic systems and control systems;</li> <li>7. maintenance and repair of electrical and electronic equipment;</li> <li>8. appropriate use of hand tools, power tools and gauges for the manufacture and repair of parts on board;</li> <li>9. maintenance and repair of ship's machinery and equipment;</li> <li>10. ensuring compliance with pollution prevention requirements;</li> <li>11. maintaining the seaworthiness of the ship;</li> <li>12. fire prevention, control and fire fighting on board;</li> <li>13. use of life-saving appliances;</li> <li>14. provision of first aid on board;</li> <li>15. monitoring the fulfillment of the requirements of regulatory enactments;</li> <li>16. application of managerial and team work skills;</li> <li>17. promoting the safety of personnel and the ship;</li> <li>18. operation control of main engine mechanisms (facilitated at the management level);</li> <li>19. identification and planning of technical operational measures (facilitated at management level);</li> <li>20. monitoring, evaluating and maintaining the safe operation of main engines and auxiliary machinery (facilitated at management level);</li> <li>21. management of ballast operations (facilitated at management level);</li> <li>22. heeling, stability and load control (facilitated at management level);</li> <li>23. monitor and control compliance with legal requirements and measures to ensure the protection of human life at sea and the marine environment (facilitated at management level);</li> <li>24. use of management and organizational skills (facilitated at management level);</li> </ol> <p>as well as who have knowledge of:</p> <ol style="list-style-type: none"> <li>1. Basics of project management and regulatory enactments regulating the operation of legal relations;</li> <li>2. organization / establishment of companies, record keeping and financial accounting system.</li> </ol>
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Results of the study programme	<p><i>Upon completion of "Marine Engineer" programme, students must be able to:</i></p> <ul style="list-style-type: none"> <li><i>- perform Marine Engineer`s duties safely at the Operational Level;</i></li> <li><i>- work safely and correctly with the Ship's electrical, electronics and control engineering, manage it within their competencies at the Operational Level;</i></li> <li><i>- perform maintenance and repair of Ship's equipment at the Operational Level;</i></li> <li><i>- control the operation of the vessel and care for persons on board at the Operational level;</i></li> <li><i>- work effectively in a team and individually;</i></li> <li><i>- identify, formulate, analyze and solve issues of maritime industry within their competence.</i></li> </ul>
Final examination upon the completion of the study programme	<i>State final examination, which includes the defense of a qualification work.</i>

## Study programme forms

### Part time extramural studies - 3 years - english

Study type and form	<i>Part time extramural studies</i>
Duration in full years	<i>3</i>
Duration in month	<i>0</i>
Language	<i>english</i>
Amount (CP)	<i>118</i>
Admission requirements (in English)	<i>1) General or vocational secondary education; 2) Document confirming that English language proficiency is at least at B2 level; 3) Documents confirming professional qualifications and experience.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>
Qualification to be obtained (in english)	<i>Marine Engineer</i>

### Places of implementation

Place name	City	Address
Novikontas Maritime College	RĪGA	DUNTES IELA 17, ZIEMEĻU RAJONS, RĪGA, LV-1005

### Full time studies - 2 years, 10 months - english

Study type and form	<i>Full time studies</i>
Duration in full years	<i>2</i>
Duration in month	<i>10</i>
Language	<i>english</i>
Amount (CP)	<i>118</i>
Admission requirements (in English)	<i>1) General or vocational secondary education; 2) Document confirming that English language proficiency is at least at B2 level.</i>
Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	<i>-</i>



Qualification to be obtained (in english)	<i>Marine Engineer</i>
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#### **Places of implementation**

<b>Place name</b>	<b>City</b>	<b>Address</b>
Novikontas Maritime College	RĪGA	DUNTES IELA 17, ZIEMEĻU RAJONS, RĪGA, LV-1005

## 3.1. Indicators Describing the Study Programme

**3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.**

Within the evaluation procedure of the study field "Seafaring", a new type and form of study implementation will be added - full-time. Analyzing the college's activities in the last seven years, the dynamics of achieving the goals set during the previous accreditation of the field of study, as well as taking into account students' and teachers' opinions, it was decided to add new types and forms of study to develop research, increase numbers of the students, develop exchange projects (including Erasmus +).

Taking into account that foreign students study at NJK, and in accordance with the requirements of Section 56, Paragraph Seven of the Law on Higher Education Institutions, the study plan must include a official language study course in the amount of at least 1 credit point, thus NMC changes the study program CP from 117 CP to 118 CP, as was done in 2019 with the study programme "Maritime Transport".

Within the evaluation procedure of the study field, the title of the qualification will be changed from "officer in charge of an engineering watch with a main propulsion machinery of 750 kW or more" to "Marine Engineer" with the aim that the title of the NMC study programme will be equal to the title of the profession specified in the professional standard. The professional standard was approved on February 23, 2007 - <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/ps0407.pdf>

The duration of the full-time program is 2 years and 10 months, which was calculated taking into account that the study program credit points amount is 118 CP and the Law on Higher Education Institutions stipulates that full-time studies are 40 CP per academic year and not less than 40 academic hours per week.

**3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.**

NJK implements the first level higher professional education study programme "Marine Engineer":

- program code - 41 525 (Study Program's decipherment: 41 - first level professional higher education (fourth level professional qualification), to be implemented after obtaining general or vocational secondary education, duration of studies in full-time studies two to three years,

525 - Mechanical Engineering (Motor Vehicles, Ships and Aircraft));

- professional qualification - Marine Engineer
- (the professional standard was approved in February 23, 2007 - link to Latvian version <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/ps0407.pdf>)
- amount of credit points - 117 CP;
- duration of the implementation - 2 years and 10 months (full time studies), 3 years (part time extramural).

Admission requirements differ for full-time and part-time studies: persons without and with work experience at sea can apply for full-time studies (experience is not required), while only persons with seagoing experience in the engine department can apply for part-time studies. Proficiency in English shall be at least B2 level.

The study programme "Marine Engineer" fully corresponds to the study field "Seafaring". The aim of the study programme is to prepare competitive specialists for the labor market with first level professional higher education in accordance with the Regulations of the Cabinet of Ministers No. 141 of March 20, 2001 "Regulations on the National Standard for First-Level Professional Higher Education" enabling to be qualified as Marine Engineer meeting the requirements of standard A-III/1 of the STCW Convention code and reduced standard A-III/2. The aim of the study field is to prepare for the labor market competitive, qualified and responsible specialists in the maritime sector with first-level professional higher education, whose qualifications depend on the study programme in accordance with the requirements of the STCW Convention.

The interconnection of the study programme parameters with the aim and results of the study programme is logical, the aim of the study programme absolutely corresponds to the title and qualification of the study program.

The duration and number of the credit points of the study programme meet the requirements for obtaining a professional qualification. Within 2 years and 10 months or 3 years students acquire a variety of competencies and skills:

1. Safe maintenance of the engine-room watchkeeping duties;
2. Use of written and oral English;
3. Use of internal communication systems;
4. Operation of main propulsion machinery and auxiliary machinery and associated control systems;
5. Operation of fuel, lubrication, ballast and other pumping systems and associated control systems;
6. Operation of electrical systems, electronic systems and control systems;
7. Maintenance and repair of electrical and electronic equipment;
8. Appropriate use of hand tools, power tools and gauges for the manufacture and repair of parts on board;
9. Maintenance and repair of ship's machinery and equipment;
10. Ensuring compliance with pollution prevention requirements;
11. Preservation of the seaworthiness of the ship;
12. Fire prevention, control and fire fighting on board;
13. Use of lifesaving appliances;

14. Provision of first aid on board;
15. Supervision of compliance with the requirements of regulatory enactments;
16. Application of management and team work skills;
17. Promoting the safety of personnel and the ship;
18. Operation control of main engine mechanisms (facilitated at the management level);
19. Identification and planning of technical operation measures (facilitated at management level);
20. Monitoring, evaluation and maintenance of safe operation of main engines and auxiliary mechanisms (facilitated at management level);
21. Management of ballast operations (facilitated at management level);
22. Tilt, endurance and load control (facilitated at management level);
23. Monitor and control the compliance with legal requirements and measures to ensure the protection of human life at sea and the marine environment (facilitated at management level);
24. Use of management and organizational skills (facilitated at management level).

Acquired skills and competencies enable the graduates to:

- perform Marine Engineer`s duties safely at the Operational Level;
- work safely and correctly with the Ship's electrical, electronics and control engineering, manage it within their competencies at the Operational Level;
- perform maintenance and repair of Ship's equipment at the Operational Level;
- control the operation of the vessel and care for persons on board at the Operational level;
- work effectively in a team and individually;
- identify, formulate, analyze and solve issues of maritime industry within their competence.

The amount of Credit Points of part time extramural and full time programs is equal - 117 CP. The duration of the implementation of the study is different:

- full-time - 2 years and 10 months;
- part-time extramural - 3 years.

In order to ensure that any person with or without experience in the maritime sector can acquire the skills and competencies required for the qualification of a Marine Engineer, and that the objectives, tasks and intended results of the program are achieved, the scope of the program is national standard of education. According to the requirements of the STCW Convention and the regulations of the Cabinet of Ministers No. 895 "Regulations Regarding Certification of Seafarers", in order to receive a NMC diploma for obtaining the study program and the Certificate of Competency of Officer in charge of an engineering watch issued in the Registry of Seamen, a mandatory 12-month complex seagoing practice must be completed, the study process is dynamic, each study year of the study plan includes sea practice. Sea practice ensures the implementation of work-based learning, acquisition of study courses ensures successful achievement of study results.

### **3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.**

Today the maritime industry plays an important role in the global economy, cargo shipping is used

to import and export various types of cargo. It's already been proven and calculated that the ships are relatively the cheapest transport for cargo transportation, which makes freight shipping by vessels a more in-demand service. Freight shipping is not possible without the ship's crew, who took care of the day-to-day delivery of the cargo from port A to port B. Most of Latvia's 12,000 active seafarers work for foreign companies, bringing 300 million euros to the Latvian economy each year.

At the beginning of 2021, 11,760 active seafarers were registered in Latvia, of which 5,704 were officers and 5,083 were ratings. The new report highlights a current shortfall of 26,240 STCW certified officers, indicating that demand for seafarers in 2021 has outpaced supply. Therefore, there is no employment problem for graduates of the NMC first level higher professional education programmes "Marine Engineer" and "Maritime Transport".

The number of NMC graduates is 49, 17 of them have obtained the qualification "Marine Engineer". By December 1, 2021, 17 graduates of Study Programme "Marine Engineer" continue to work in the maritime industry.

#### **3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.**

The number of students enrolled in the study program "Marine Engineer" has remained unchanged for 4 years in a row, as well as in the reporting period there is a tendency that more people choose the "Maritime Transport" program.

Since the accreditation of the study field in 2013 and until February 1, 2022, the number of NMC graduates is 49 (1 person has graduated in the study year 2021/2022, but taking into account that the study year has not been completed yet, the study year 2021/2022 annual data are not used for statistics), out of 48 graduates - 17 have completed the "Marine Engineer" program. The number of graduates in the study year 2020/2021 is the lowest indicator in the reporting period (except for the study year 2016/2017, the first graduate of the study program "Marine Engineer"), which is related to the spread of the Covid-19 virus. The spread of the Covid-19 virus adversely affected and continues to affect the crew change on board, students were delayed from sea practice, then had to wait for students to complete the vaccination course, and there were periods when studies were held completely remotely and contact hours were canceled and postponed.

NMC constantly monitors the progress of students, the director of the study program and the head of the study department maintains regular communication with the students, and if the student is inactive, does not want to continue or has other personal reasons, the director of the study program compiles and maintains a list and transfers it to the study department to complete the extramatriculation process. Due to the fact that students are working seafarers and may be at sea once or more per year, it is not always possible to contact them, so the number of students dropped varies from year to year and there is no set dynamics.

Since the accreditation of the study field in 2013 until now, NMC has implemented only a part-time extramural program in English, thus the distribution of statistical data in different study forms and languages is useless.

Statistics on students during the reporting period are available in the annex.

**3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).**

## **3.2. The Content of Studies and Implementation Thereof**

**3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.**

The content of the study program is developed and complies with the following regulatory enactments:

- STCW Convention - the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (as amended);
- Regulations of the Cabinet of Ministers No. 895 - Regulations for the Certification of Seafarers;
- Regulations of the Cabinet of Ministers No. 710 - Regulations for the Certification, Implementation and Supervision of Seafarers' Vocational Training Programs;
- Directive 2008/106 / EC of the European Parliament and of the Council of 19 November 2008 on the minimum level of training of seafarers;
- Directive 2012/35 / EU of the European Parliament and of the Council of 21 November 2012 amending Directive 2008/106 / EC on the minimum level of training of seafarers Text with EEA relevance;
- Seafarers' Register standard programs;
- Seafarers' training courses developed by the International Maritime Organization (IMO model course);
- Instructions of the Register of Seamen;
- Professional standard - 2.48. Standard for the profession of ship's engineer (operational level);
- Regulations of the Cabinet of Ministers No. 460 - Regulations on the List of Specialties, Subspecialties and Additional Specialties for Regulated Professions.

These documents state that the certification of seafarers must be in accordance with the STCW Convention and Code. The requirements of the STCW Convention state. The professional competencies and competencies required for a ship's operator (at the operational level) are specified in the STCW Convention Standard of Competence A-III/1 - " Mandatory Minimum Requirements for Certification of Officers in Charge of an Engineering Watch in a Manned Engine-

Room Or Designated Duty Engineers in a Periodically Unmanned Engine-Room". Other documents according to STCW are shown as follows:

MK.895 states:

- Certification of the personnel of a seagoing ship (hereinafter in this Part - a ship) in the Republic of Latvia shall be performed in accordance with the requirements of the STCW Convention and these Regulations.

MK.710 states:

- The educational institution or training center shall observe in its activities, as well as in the development and implementation of the program:

6.1. STCW Convention;

6.2. A model course for the training of seafarers developed by the International Maritime Organization (hereinafter - the IMO model course);

6.3. a standard program, if one has been developed;

6.4. Instructions from the Register of Seafarers;

6.5. regulatory enactments regulating the field of maritime affairs and education.

Directive 2008/106 / EC of the European Parliament and of the Council states:

- Member States shall take all necessary measures to ensure that seafarers serving on ships referred to in Article 2 are trained at least in accordance with the requirements of the STCW Convention, as set out in Annex I to this Directive, and have certificates as set out in Article 4, or appropriate certificates as provided for in Article 1 (27).

Professional standard - 2.48. Standard for the profession of ship's engineer (operational level) states:

- The ship's engineer (at the operational level) can work for Latvia or another vessels flying their flag in international navigation, provided that he professional competencies in accordance with the procedures specified by the Cabinet of Ministers have been recognized as in accordance with the relevant international conventions on the training and certification of seafarers, as well as watchkeeping" (STCW (Standards of Training Certification and Watchkeeping) Convention).After all the above, we can conclude that the interconnection between all the mentioned documents with which the NJK study programs correspond has been proved.

Requirements of applicable standards to which the study program meets:

Standard	Profession description and requirements
Regulations of the Cabinet of Ministers No. 895	55.5. officer in charge of an engineering watch on ships powered by main propulsion machinery of 750 kW propulsion power or more - is entitled to hold the capacity of an officer in charge of an engineering watch on ships without restrictions of main propulsion power. The main propulsion power of a ship may be limited in accordance with the completed vocational education programme;

Standard of competence of the STCW Convention A-III / 1	Mandatory Minimum Requirements for Certification of Officers in Charge of an Engineering Watch in a Manned Engine-Room Or Designated Duty Engineers in a Periodically Unmanned Engine-Room
Directive 2008/106 / EC of the European Parliament and of the Council of 19 November 2008 on the minimum level of training of seafarers;	Mandatory minimum requirements for certification of officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room
Directive 2012/35 / EU of the European Parliament and of the Council of 21 November 2012	Mandatory minimum requirements for certification of officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room
II. Occupational standards for the fourth level of professional qualification	2.48. Standard for the profession of ship's engineer (operational level)
Regulations of the Cabinet of Ministers No.460	Engineer in charge of an engineering watch on ships whose main power plant has a power of 750 kW or more

NMC is regularly audited in accordance with these standards, the supervisory authority is the Maritime Administration of Latvia - Registry of Seamen, the compliance of which is also regularly audited by the European Maritime Safety Agency (EMSA) on behalf of the European Commission. In addition, to ensure this compliance, NMC has established close cooperation with many maritime companies with which it is regularly communicated and received feedback. NMC employs full-time trainers and regularly recruits trainers from the labor market, ie active masters or senior mechanics, who provide information on the latest maritime trends.

The goal of the study program "Marine Engineer" is to prepare competitive specialists for the labor market with first level professional higher education in accordance with the Regulations of the Cabinet of Ministers No. 141 of March 20, 2001 "Regulations on the National Standard for First-Level Professional Higher Education" enabling to be qualified as Marine Engineer meeting the requirements of standard A-III/1 of the STCW Convention code and reduced standard A-III/2. In turn, the goals and results set in the descriptions of study courses are closely related to the goal and results of the study program.

The processes of development and review of study programs are regulated by the NMC QMS procedure "Development, Inspection and Regular Inspection of Study Programs". An internal audit is carried out every year in accordance with the schedule in order to continuously check the content of the study program and study courses for compliance with the industry, labor market needs and scientific trends. If deficiencies / inconsistencies are identified during the audit, the director of the study program draws up a plan for how the content will be updated and agrees with the QMS specialist.

**3.2.2. In the case of master's and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).**

Not applicable



**3.2.3. Assessment of the study programme including the study course/ module implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.**

NMC runs programmes in English.

Novikontas has started to implement Student Centered Learning (SCL) since the first design and development and first accreditation of educational programs, e.g. since year 2013/2014.

Novikontas is highly focused on all the aspects, that the student's voice is heard and student can highly affect the educational process.

The most important principles implemented by NMC:

- Required active learning and reflective. All the students shall be active during the educational process, that is why we use plenty of practical exercises to engage the student and to make him/her reflect on the competences s/he gains.
- Does not have one static approach for all students. The program and teaching/learning activities states the learning outcomes, which shall be reached by the students, but how that outcomes will be reached, by what learning methods, what media to use for that – in most cases decided by the student/s.
- NMC recognizes student's diversity.
- Students have different experience, background, knowledge, skills. That is why student can decide not only on the way how s/he performs learning activities, but also which study modules in which sequence will be followed. Does s/he take complicated modules/learning activities first or simple ones. So the way of learning path is highly determined by student.
- Students need to have a choice and control over learning. Same as above. Any student gets access to the entire term of the study program and adjusts his/her own way to gain all the required competences.
- Learning needs cooperation between student and lecturer. There is quite close cooperation between them: a) Lecturer states the vector, student reach it in his/her own way and reflects on the new competences. b) Student needs assistance, lecturer provides the assistance in different methods: face-to-face, digital video, digital audio, email, chats, etc. c) All the lecturers are former or active seafarers, most of them served in Master's of Chief Engineer rank, so cooperation is highly relevant to real working conditions on ships.
- Learning needs cooperation between student and maritime professionals. Novikontas has established the study process in the way, when the student has much time for direct access to Maritime Officers. As example, on the part-time studies, students have 80% of all the studies on board ships; when full time students have minimum 45% of all the studies on board ships. Communication and learning from real professionals, when each of them has his/her own experience, which is transferred to students during the studies – highly improves the quality of the

educational program.

- NMC conducts a students` survey, a student can influence his / her study process by providing feedback to the college. The opinion of students is taken into account for the improvement of the content of the study programme;
- NMC ensures access to education and personalization of studies by integrating modern teaching methods, innovations, actively digitizing the study process, providing informative and material support for students;
- NMC ensures the availability of information, incl. placing internal normative documents, study course descriptions and methodological materials - "Novis";
- NMC ensures the recognition and equivalence of previous education and practical experience;
- NMC integrates in the study process trainings with simulators, practice, bringing the study process closer to the real situation at sea.

The study programme and study course implementation methods are chosen to achieve the planned results of the study course, about which students can find information in "Novis".

The implementation of the study programme is dynamic, creative and diverse, using different methods:

- 1) lectures and contact hours / consultations - to acquaint students with information that is not available in a sufficient amount of study literature, as well as study courses in which independent acquisition of study materials is difficult;
- 2) independent work - for students to independently read the necessary sources, analyze them;
- 3) discussions - is used in study courses, where simultaneously with the acquisition of theoretical knowledge, communicative and argumentation skills are also developed;
- 4) work in small groups with simulators - to learn to work in a team, as well as to improve communication skills;
- 5) practical classes / laboratory works - to help to apply the acquired theoretical knowledge in practice;
- 6) practice - in order to acquire and develop practical work skills by getting acquainted with the specifics of work in the maritime sector;
- 7) e-learning in the "Novis" system - taking into account that students can continue to study the program while they are at sea, e-learning is provided to improve communication between academic staff and students, in each study course consultations are held in the "Novis", students receive , performs and submits works in the "Novis", the academic staff checks and evaluates the works in the e-platform.

For the implementation of the study programme and study courses, NMC uses the digital environment "Novis", which is created on the "Canvas" platform. "Novis" provides information about teaching staff, study courses, college news, internship vacancies, information about study progress, etc. "Novis" is used by students, academic staff, directors of study programmes and the head of the study department.

There are significant differences in the implementation of full time and part time studies - the full-time program consists of 72% contact hours, the part-time program - 27%. The implementation methods of study courses are the same.

**3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).**

In order to obtain a seafarer's professional qualification, a seafarer's professional training program must be completed in accordance with the STCW Convention. The regulatory enactments also specify the theoretical knowledge and practical skills required for each seafarer's professional qualification, the duration of the seagoing service, as well as the fact that the seagoing service must be documented in the training record book. The study programme includes mandatory 12-month sea going practice. The number of credit points for practice is 52 CP.

Upon commencement of studies, students are informed that the internship program will be completed only if the internship is completed as part of a crew on a merchant fleet vessels powered by main propulsion machinery of 750 kW propulsion power or more during which they have completed at least 6 months of engine-room watchkeeping duties under the supervision of a qualified engineer officer. For officers in charge of an engineering watch requirements for practice are following: combined workshop skills training and approved seagoing service shall consist of not less than 12 months (at least 6 month - seagoing practice).

Prior to the internship, students receive a Training Record Book for Engineer Officers (cadets) from the Study Department and are informed that there must be a tripartite internship agreement, without the agreement and the record book - the internship is not counted.

The internship program is based on the content of the seagoing record book. The internship program is available to students on the Novis platform.

NMC provides and assists students with internships.

The largest maritime companies in the world and in Latvia actively cooperate with the Novikontas Maritime College, which are likely to offer internships to NMC students:

Anglo-Eastern / GB /, Anthony Veder Rederijzaken / NL /, Arklow Shipping Ltd / IE /, Atlas Services Group Latvia / LV /, Atlas Services Group Marine / NL /, Atlas Services Group Merchant / NL /, Bank / LV /, BCI Ltd / GB /, Berg Maritime Management Ltd / IE /, Bernhard Schulte SHM / IM /, Bernhard Schulte SHM / SG /, BIMS / LV /, BMGS / LV /, Boskalis Baltic / LT /, Brovigtank / NO /, BSM CSC / LV /, Buto Yacht / LV /, Candina Baltica / LV /, Chemtrans Crewmanagement / DE /, Clyde Marine Recruitment / LV /, Columbia SHM / CY /, Columbia SHM / DE /, Crew Chart Ship Management / SE /, Crystalwater / NL /, Deep Sea Management / AE /, Delta Transit / LV /, Det Norske Veritas Latvia / EE /, Det Norske Veritas OY / FI /, Det Norske Veritas Sweden / SE /, DS Crewing / DE /, Eco Port / LV /, Entra Agency / LV /, Essberger Crewing Services / DE /, Euroceanica (UK) Ltd / GB /, Expromo Agency / LV /, Fast Bunkering / LV /, Gulf Offshore NS Limited / GB /, Harren & Partner / DE /, Hoegh LNG Fleet Management / NO /, IMTS Ltd / GB /, INC Latvia / LV /, Intership Ltd / VC /, Marine Finance / LV /, Maritime Service Company / LV /, JV Maritime Consulting / LV /, Page Ltd / LV, Limetree Shipping Company Ltd / MT /, Lowland International / LV /, Lowland Marine & Offshore / NL /, Lowland Nederland / NL /, LR VR Ventspils Board / LV /, LSC Shipmanagement / LV /, Maersk / IN /, Maestro SHM Ltd / CY /, Mansel Ltd / BM /, Marine Management Limited / BZ /, Mega Chemicals

Schiffahrt / CH /, Mideast Ship Management Limited JLT / AE /, MRM Holdings / MY /, N Stars / LV /, NMMS Ltd / GB /, Norbulk Shipping / GB /, Nordic Tankers Marine / LV /, Norwegian Crew M / NO /, Orion & Ko / LV /, ORLEN Lithuania / LT /, OSM Crew M INC / NO /, OSM Crew M Ltd / CY /, PKL Fleet / LV /, RJ & L.Mitchelmore / GB /, Freeport of Riga Fleet / LV /, Freeport of Riga Authority / LV /, Riga Sea Supply / LV /, Roko Marine Service / LV /, Sailinga / LT /, Salacgriva Navigation INC / MH /, Saldus Navigation INC / MH /, Sanco Holding / NO /, Saulkrasti Navigation INC / MH /, Sechste Buettner / DE /, Selandia Crew Management / LV /, Sigulda Navigation INC / MH /, Skrunda Navigation INC / MH /, SP Management / LV /, Straupe Navigation INC / MH /, Subsea 7 Limited / GB /, Tallink Latvia / LV /, Techno Electronics / LV /, Tsakos Columbia SHM / EL /, UAB Boskalis Baltic branch / LV /, UEG / LV /, Ultramarin / LV /, Uni-Tankers / DK /, Ventspils Freeport Authority / LV /, Voyaing Group Ltd / MH /, Vroon Offshore Services Limited / GB /, Vroon SHM / NL /, VShips UK Ltd / GB /, Wappen Bayern / DE /, Wappen Bayern / DE /, Wappen Flensburg / DE /, Wappen Frankfurt / DE /, Wappen Hamburg / DE /, Wappen Leipzig / DE /, Wappen Munich / DE /, Wappen Nuremberg / DE /, Wappen Riga / LV /, Wappen Stuttgart / DE /, Welton Enterprises / EE /, Wisby SHM / SE /, WLCM - RHL Conscientia (DE), Zodiac MA Ltd (GB).

NMC runs study programmes in English. Due to the specifics of the maritime industry and the fact that the official working language of the maritime industry is English, all internships are conducted in English, as all documentation as well as on-board communication is in English.

The objectives and results of the internship are closely linked to the skills and competences specified in the professional standard and the STCW Convention.

### **3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).**

### **3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.**

NMC is currently changing the concept of qualification work topics, offering students the freedom to choose a topic / problem for research, arguing the relevance of the qualification work topic in the maritime field. Until now, the qualification work has been divided into 2 parts: Part 1 - organization, calculation and implementation of cargo shipping from port A to port B, Part 2 - additional topic according to the approved list of sample topics.

The Qualification Thesis Defense Commission always consists of 5 people, 3 of whom are representatives of the industry and employers.

Examples of qualification topics chosen by students in the last four years:

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Topics of the final theses of the students

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*Study Programme "Maritime Transport"*

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Cyber Security onboard ships

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Planning, execution and evaluation of General cargo ship "Adriata" voyage from Amsterdam, Netherlands to Silamae, Estonia port with wood chips. With additional topic - Mixed crew

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Ballast Water Treatment Systems

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Ship Energy Efficiency

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Planning, execution and evaluation of oil/chemical tanker "Ugale" voyage from Amsterdam, Netherlands to Tema, Ghana with unleaded gasoline cargo. With additional topic: Vetting Inspection

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Topics of the final theses of the students

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Study programme "Marine Engineer"

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SOx Scrubber system

---

Marine incinerator

---

Sewage Treatment Plant

---

Fuel Oil and all associated machineries, systems and equipment on board the ship

---

Compressed air systems at the operational level during the watch

The topics are different, but as is seen, all topics are related to either the systems / equipment on board or the crew, such as crew safety, mixed crew. The topics of the students' final theses indicate that the students' research interest was related to the field of the maritime industry, which fully corresponds to the goals of the study programs and the planned results to be achieved.

Evaluations of qualification works in the last four years:

Evaluations of qualification works of the Study Programme "Maritime Transport"								
Year	Evaluation of qualification works							Average mark
	4	5	6	7	8	9	10	
2018	0	0	3	3	4	2	0	7,4
2019	0	0	1	1	2	2	0	7,8
2020	0	0	0	3	1	0	0	7,25

2021	0	0	1	2	0	1	0	7,25
<b>Evaluations of qualification works of the Study Programme "Marine Engineer"</b>								
<b>Year</b>	<b>Evaluations of qualification works</b>							<b>Average mark</b>
	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	
2018	0	0	1	0	2	2	4	8,9
2019	0	0	0	0	0	0	3	10
2020	0	0	0	1	1	1	1	8,5
2021	-	-	-	-	-	-	-	-

Evaluations of qualification works in the reporting period are at a good level, lower mark - 6 (almost good), highest mark - 10 (with distinction), which indicates the stability and quality of study programmes.

### 3.3. Resources and Provision of the Study Programme

**3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.**

Study programs are implemented at Dunties Street 17a and Dunties Street 17d. NJK is located on 2 floors, and next to the college building is the NJK swimming pool building - the only swimming pool building of its kind in the Baltics, as well as one of the most modern maritime rescue simulation swimming pool buildings in Europe. , thunderstorms, lightning and thunderstorms, as well as various preset scenarios with a total area of 1415.19 m<sup>2</sup>

- 212.4 m<sup>2</sup> Safety course simulator room (swimming pool with weather simulation);
- 119.0 m<sup>2</sup> Fire fighting simulator rooms;
- 29.76 m<sup>2</sup> Welding Laboratory;
- 29.76 m<sup>2</sup> OWS laboratory;
- 29.76 m<sup>2</sup> Electrical and Hydraulic Laboratory;

- 34 m2 High Voltage Laboratory;
- 1009.9 m2 Dantes Street 17A study rooms.

NMC has in property area of 2879 m2.

NJK is equipped and modernized with 1 computer classroom, 24 classrooms, various types of laboratories (4 - Large navigation bridges, 7 - Small navigation bridges, 7 - Engine room simulators, 8 - Liquid cargo control room simulators, work aloft simulator, etc.) with 12 workstations and 3 administrative premises. Computers are used in the study process for students' individual and scientific work. All NMC computers are connected to the NMC Intranet network, as well as Internet access is provided.

The study department (the department responsible for the implementation of the study program) has in property the auditoriums (equipped with the necessary TV, audio, video, computer equipment), as well as the technical equipment necessary to ensure the study process according to specialization (TRANSAS ERS 5000 simulators - engine room simulator with 7 Control Room , quality management system, training process management system (TMS), SIA "Novikontas Jūras koledža" database, etc.).

Material resources required for the implementation of the programme:

NR. p.k	List of equipment	Quantity
<b>1.</b>	<b>ROOM EQUIPMENT</b>	
1.1.	Classrooms equipped with tables, chairs, whiteboards, an instructor's seat	
1.2.	Computer class with 10 computer seats	
<b>2.</b>	<b>TECHNOLOGICAL EQUIPMENT, EQUIPMENT AND WORK TOOLS</b>	

TRANSAS ERS 5000 simulator		
2.1.	2.1.1	General Cargo Ship Propulsion Plant 4
	2.1.2	General Cargo Ship Electric Plant 4
	2.1.3	General Cargo Ship Auxiliary Systems 4
	2.1.4	RO-RO Ship Propulsion Plant 4
	2.1.5	RO-RO Ship Electric Plant 4
	2.1.6	RO-RO Ship Auxiliary Systems 4
	2.1.7	Tanker LCC Propulsion Plant 4
	2.1.8	Tanker LCC Electric Plant 4
	2.1.9	Tanker LCC Auxiliary Systems 4
	2.1.10	Tanker LCC Cargo Systems 4
	2.1.11	Trawler Propulsion Plant 4
	2.1.12	Trawler Electric Plant 4
	2.1.13	Trawler Auxiliary Systems 4
	2.1.14	General Cargo-2 Ship Propulsion Plant 1
	2.1.15	General Cargo-2 Ship Electric Plant 1
	2.1.16	General Cargo-2 Ship Auxiliary Systems 1
	2.1.17	LNG Propulsion Plant 3
	2.1.18	LNG Electric Plant 3
	2.1.19	LNG Auxiliary Systems 1



2.2.	Engine room simulator (14 monitors)	7
2.3.	Instructor / learner communication kit	3
2.4.	Videocamera	1
2.5.	Fire extinguisher	1
2.6.	Swimming pool	1
2.7.	Lifejackets	40
2.8.	Immersion suits	42
2.9.	Inflatable life jackets	16
2.10.	Lifebuoys	2
2.11.	Inflatable liferaft in a container with a hydrostatic release device	3
2.12.	Full lifeboat equipment set	1
2.13.	Full liferaft equipment set	2
2.14.	SART / Radar transponder (layout)	2
2.15.	EPIRB radio buoy (layout)	2
2.16.	First aid kit	1
2.17.	Human size mannequin for resuscitation exercises	2
2.18.	Lifeboat with equipment	1
2.19.	Rescue boats	1
2.20.	Firefighting equipment set	12

2.21.	Firefighter suits	24
2.22.	Model of ship mechanisms	13
2.23.	Smoke generator	1

Students have the opportunity to use the digital study platform "Novis". "Novis" provides an excellent opportunity to retain the information needed to organize effective study courses. It is possible to download from the interactive system (Novis) information no matter where the student is, exchange materials with teachers and receive advice on issues of interest. "Novis" allows to follow the progress of students' studies, look at the student's marks, activity in taking study courses, fulfilling independent tasks.

The NJK database provides students with access to study and scientific literature in electronic format in all study courses, which facilitates studies and provides students with easy access to study materials, even on board, which is especially relevant for part-time students.

On the basis of cooperation agreements, NMC students have the opportunity to use the resources of RTU Olaine College of Technology and Riga Technical College (RTK) for the acquisition of study programmes, including the library, as well as NMC is allowed to use 40 m2 of Freeport of Riga area for the providing practical trainings.

NMC students and lecturers are have academic freedom to use all the possibilities of NMC infrastructure and material and technical provision. The available resources and provision meet the conditions for the implementation of the study programme and promote the achievement of study results.

The list of all the study equipment and facilities, informational resources makes evident, that Novikontas Maritime College has quite enhanced combination of all the resources, what makes it one of the most advanced maritime educational institution in Europe.

All this equipment has been purchased and implemented based on the:

- Minimum STCW Convention and Code requirements
- IMO (International Maritime Organizations) recommendations stated within Model Courses
- Working Specifics and Environment on ships
- Best practices of Maritime Higher Educational Institutions all over the world.

Every piece of technical, informational and digital recourse make qualitative contribution to reach all the objectives of the study program.

Examples:

1. Engine Room Simulators provides students with the competence "To carry out engine watch"
2. Welding laboratory provides students with competence "To perform welding operations"
3. etc.

### **3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).**

**3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).**

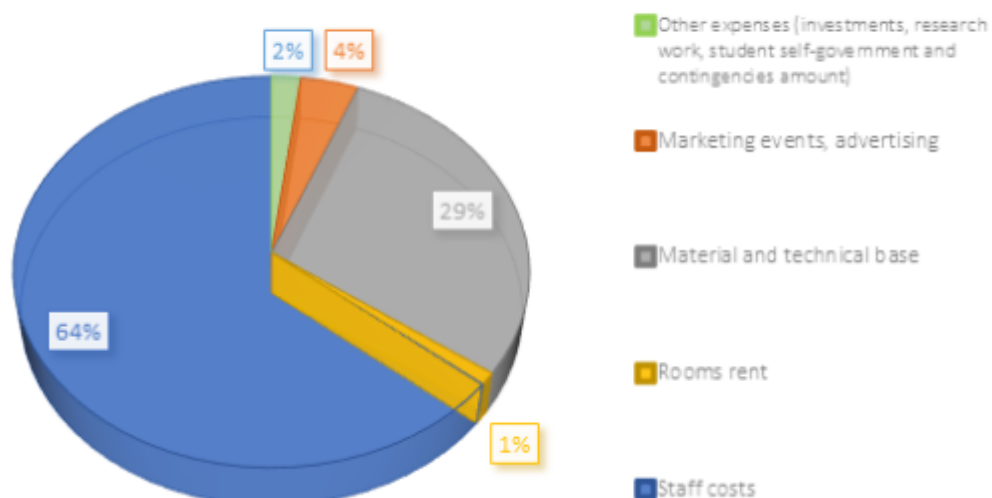
The NMC sources of funding are specified in Article 58 of the NJK Regulations that the college is financed by its founder, observing the minimum costs of the implementation of educational programmes per student set by the Cabinet of Ministers. The highest governing body and decision-making body of the college in strategic, financial and economic matters is the Founder.

Taking into account that "Novikontas Maritime College" is a private college, its main source of funding is income from economic activities, as well as Erasmus + program funding, which supports the mobility of academic and non-academic staff (professional development, participation in scientific conferences, personal development, promotion of cooperation projects). NMC provides funding for science researches through its own resources as well as external funding.

The tuition fee for 1 study year for students is approved by the ordinance of the College Director or Deputy Director every year until January 15. The student can pay splitting the payment (the maximum tuition fee can be divided into three parts) or for the entire study year in accordance with the study agreement. If a student pays for the entire study programme in one payment at the beginning of the studies, then they are not subject to inflation, etc. tuition fee changes. The tuition fee includes all the necessary study materials and all the necessary courses in order to receive a seafarers' certificate of competence in the Register of Seamen of Latvian.

The costs of NMC programs mainly consist of staff costs and material and technical base expenses. Ensuring an increase in the number of students is one of the parts of NMC's strategy for quality studies, therefore the set of marketing and sales expenses is considered to be appropriate. Other expenses includes research, investment, student self-government and contingency amount.

## Study Programme's "Marine Engineer" expenses



Below is a detailed description of the expenses for the study programme "Marine Engineer" (part-time, full-time):

Expenses		
	EUR	Izdevumi %
<b>1. Staff costs</b>	3756 €	63,88%
<i>1.1. Administrative staff costs</i>	566 €	9,63%
1.1.1. Salaries of administrative staff	458 €	7,79%
1.1.2. The employer's social tax	108 €	1,84%
<i>1.2. Academic staff costs</i>	3190 €	54,25%
1.2.1. Salaries of administrative staff	2552 €	43,40%
1.2.2. The employer's social tax	638 €	10,85%
<b>2. Rooms rent</b>	34 €	0,58%
<b>3. Material and technical base</b>	1713 €	29,13%

3.1. Methodical materials	10 €	0,17%
3.2. Materials for practical work	30 €	0,51%
3.3. Diplomas and other document	5 €	0,09%
3.4. Expenses related to the organization of the examination	128 €	2,18%
3.5. Improvement of material and technical base	120 €	2,04%
3.6. Certificates for work at sea	1420 €	24,15%
<b>4. Marketing events, advertising</b>	259 €	4,40%
<b>5. Other expenses (investments, research work, student self-government and contingencies amount)</b>	118 €	2,01%
Total expenses for one student for the whole study programme	<b>5880 €</b>	<b>100,00%</b>

Study fee for part-time and full-time students is the same - 1960 EUR per year.

The minimum number of students in the study programme in order to ensure the profitability of the study programme (part-time, full-time) at the same time - 50 people.

The minimum number of students in one study year to ensure the profitability of the study program is 10 people.

## 3.4. Teaching Staff

**3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.**

In order to ensure the quality of implementation of the study programme, the teaching staff involved in the implementation of the study program is supplementing their professional knowledge in seminars, conferences, participating in various projects and research work, as well as obtains special training every 5 years. Information on the in-service training program is available in 2.3.6. point.

The teaching staff involved in the implementation of the study program has a qualification in accordance with the specifics of the study program, the requirements of regulatory enactments and the regulations on academic and administrative positions in NMC, thus ensuring the achievement of the set results of the study programme, implementation of NMC goals and tasks. The qualifications of the teaching staff of the professional field comply with the requirements of the STCW Convention, the study courses of the professional field are implemented by experienced and professional academic staff and representatives of the field.

19 representatives of the academic staff are involved in the implementation of the study programme courses that make up 109 CP out of 118 CP, including qualification sea practice, which makes up 93.2% of the total study programme. 8 CP out of 118 CP - is a state final examination, which consists of 1) state final examination in maritime English, 2) defense of a qualification work and 3) complex examination in the specialty.

#### **3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.**

The changes to the composition of the teaching staff 2014 - 2021:

<b>Year</b>	<b>Number of Doccents</b>	<b>Number of Lecturers</b>	<b>Number of guest lecturers</b>
2014	5	6	10
2015	5	8	12
2016	5	9	9
2017	2	11	11
2018	2	10	11
2019	2	10	12
2020	2	10	12
2021 (01.02.2022)	1	8	10

If we compare the number of teaching staff involved in the study programme during the period of opening the study field (2013/2014 academic year) with the data of 01.02.2022, it can be seen that the number of teaching staff has increased.

The teaching staff consists of 2 guest lecturer with a doctoral degree, at least 2 lecturers are

currently studying in the doctoral study programme. Professional study courses are taught by guest lecturers and lecturers with a master 's degree and professional experience in the field corresponding to the study course.

Since 2014, the quality of studies has significantly increased because of experienced and professional academic staff.

**3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).**

**3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).**

**3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).**

The mutual cooperation of the teaching staff is formed in individual negotiations with the directors of the study programs, in the discussions between the lecturers, in the meetings of the NMC lecturers on news and current events in the higher education and professional fields, the lecturers from one and / or two programs are involved together in projects and research. The internal audit of the study courses is carried out every year, in case of shortcomings or inconsistencies in the content, the study director engage teaching staff who, within the framework of mutual cooperation, provide consultations to the study director on updating the content of the study courses.

At the time of submitting the self-assessment report, the ratio of the number of students and teaching staff within the study programme is 69 to 19, which is 6.3.

# Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	Diploma.zip	Diploms.zip
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	Statistika par studējošajiem pārskata periodā.pdf	Statistika par studējošajiem pārskata periodā.pdf
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	ENG_english- atbilstība valsts izglītības standartam.pdf	ENG-lv atbilstība valsts izglītības standartam Lv.pdf
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	ENG_english_ atbilstība profesijas standartam.pdf	ENG_lv_ atbilstība profesijas standartam.pdf
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)	Kuļu mehānikas studiju programmas atbilstība atbilstošās nozares specifiskajam normatīvajam regulējumam-ENG.pdf	Kuļu mehānikas studiju programmas atbilstība atbilstošās nozares specifiskajam normatīvajam regulējumam-LV.pdf
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	ENG_english_ KM studiju kursu kartējums.pdf	ENG_LV-KM studiju kursu kartējums.pdf
The curriculum of the study programme (for each type and form of the implementation of the study programme)	Study Programme` s Marine Engineer curriculums.zip	Studiju programmas Kuģa mehānikas plāni.zip
Descriptions of the study courses/ modules	Descriptions of the study courses of Study Programme Marine Engineer.zip	Studiju programmas Kuģa mehānikas studiju kursu apraksti.zip
Description of the organisation of the internship of the students (if applicable)	10. Organization of practice .docx	10. Prakses organizēšanas kārtība .docx
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		