STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Klaipėdos universiteto

JŪRŲ UOSTO INŽINERIJOS STUDIJŲ PROGRAMOS (612H53001)

VERTINIMO IŠVADOS

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OF *SEA PORT ENGINEERING* (612H53001)

STUDY PROGRAMME

at Klaipėda university

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Išvados parengtos anglų kalba
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DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	*Jūrų uosto inžinerija*
Valstybinis kodas	612H53001
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Jūrų inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (4)
Studijų programos apimtis kreditais	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Jūrų uostų inžinerijos bakalauras
Studijų programos įregistravimo data	2009-08-31 , Nr.1-73

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INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	*Sea Port engineering*
State code	612H53001
Study area	Technology Sciences
Study field	Marine engineering
Kind of the study programme	University Studies
Study Cycle	First
Study mode (length in years)	Full-time (4)
Volume of the study programme in credits	240
Degree and (or) professional qualifications awarded	Bachelor's Degree in Sea Port engineering
Date of registration of the study programme	2009-08-31 , Nr.1-73

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CONTENTS

I. INTRODUCTION

Klaipeda University (KU) was founded in 1991. KU is a classical university in the Baltic Sea and Western Lithuania region of economic, cultural and geopolitical distinction. KU was founded to provide studies and carry out scientific research on marine and pre-costal zone subjects. The distinctive features and the related mission component of the University are clearly described, as well as the general description of the University and its management.

The undergraduate Seaport Technology study programme was launched at KU in 1997. The Sea Port Technology programme was last accredited in 2009 until 2013-12-31 (by Order No. 1-73 of 2009-08-17 of the Director of the Centre for Study Quality Assessment). In pursuance of 'the List of Study Areas and Fields in which Studies are Rendered in Higher Education Institutions' approved by Resolution No 1749 of 2012-09-23 of the Government of the Republic of Lithuania, the Transport Engineering Seaport Technology study programme was reoriented to Sea Port Engineering study programme since 2010. At present it is being carried out as a full-time study programme.

The self-assessment work group assessing the study programme Sea Port Technology was formed and approved in October 2012 (Shipping Department, Minutes No. 46JT-L2 and order No. S-193 of the University's Rector). The team comprised Head of the Shipping Department, assoc. prof. dr. Valdas Lukauskas, three other members from the academic staff, one student and one person from the stakeholders. It is praiseworthy that these three key groups were represented in the team.

The Shipping Department manages and arranges both The Sea Port Engineering study programme and the Sea Port Management study programme. Therefore, many facts and processes are similar in both programmes. Thus, the external evaluation reports are in many ways similar.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

This distinctive study programme serves a growing need for Sea Port Engineering professionals and reflects academic requirements, as well as engineering at the first cycle study level. Furthermore, the name of the programme, its learning outcomes, contents and qualification are in harmony. The programme aims are consistent with the type and level of studies and the level of qualification offered.

According to the SER (Self-Evaluation Report), the main aim of the programme comprises a list of objectives and it is difficult to discern eventual primary aim(s) and their subordinates. There are more than 10 clauses in succession (e.g. *"...; for using high technologies; who will be able to apply the gained knowledge in the practical activity and develop new one; to combine the acquired technology science knowledge and skills with the business and management background;…"* Despite the fact that the aims and objectives are sensible as such, some clarification or structuring, for example by making a figure, could have been a more understandable way of presenting the programme aims. On the other hand, the aims are publicly available on the KU website.

The programme aims reflect the academic and professional requirements, public needs and the

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needs of the labour market. According to the data received from a preliminary survey of representatives of the marine complex and presented in the SER, the demand of the port engineering professionals in the western region of Lithuania would include 20-25 Bachelor Degree specialists from the Sea Port Engineering studies annually. According to the SER, the yearly number of admitted students has varied between 19 and 27 during the years 2008 – 2012, while the number of graduates during the same years has varied between 18 and 24 persons annually. Furthermore, 9 graduates out of the total of 20 persons in 2011 have started studying mainly in the Sea Port Management Master Degree studies, one of the graduates having started studying in the Naval Architecture Master Degree studies. Despite the fact that some of the students may study part-time in the Master Degree study programme, a larger yearly number of graduates from the Sea Port Engineering study programme may be necessary to fulfil the need for new workforce. To verify this, KU should make a systematic survey on the correspondence between the present number of graduates and the need for new recruits in the working life.

The interview during on site visit of the representatives from the companies and social partners clearly confirmed that there is a constant need for new Sea Port Engineering professionals since Port of Klaipeda and its throughput of cargo is growing and new infrastructure and technology is being built and introduced. However, more systematic and formalised qualitative and quantitative anticipation of the training needs (necessary volume and skills of the workforce in the future) might yield useful information to support scaling the student admission numbers and developing the study programme and in fact, the Sea Port Management study programme as well.

The learning outcomes are well and clearly defined in the SER. The discussion with the employers indicated that the students have good basic skills and knowledge that can and should be complemented with the special skills needed in the labour market.

Research and design skills are mentioned as one of the Programme's learning outcomes and a similar outcome can be found in the Management Programme when the SER's are compared to each other. During the interviews, the distinction between the Bachelor and Master level research skills and Theses were clarified, the former being more technical and practical in nature – a first step to research activities.

2. Curriculum design

According to the SER, this 240 ECTS credit study programme is divided into the following subject groups or Blocks:

- university general education subjects - (Block A) - 26 ECTS credits
- study subjects of the program (Block B) – 148 ECTS credits
- special education program of study subjects (Block C) - 66 ECTS credits, with 8 ECTS credits allocated to elective study modules.

In comparison, The Order No V-501 of 2010-04-09 of the Minister of Education and Science require that an undergraduate program has to consist of the following blocks:

- university general education subjects (Block A), not less than 15 ECTS credits;
- study subjects of the program (Block B), not less than 145 ECTS credits;
- special education program of study subjects (Block C) - not less than 60 ECTS credits, of which at least 8 ECTS credits are allocated to elective study modules.

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The foregoing shows clearly that the distribution of the study programme's credits fulfils the requirements of the mentioned Order.

In terms of credits, the study subjects are spread rather evenly throughout the semesters. Furthermore, the study subjects are appropriate for the achievement of the intended learning outcomes. The curriculum design is systematic and clear and at the level of study subject modules descriptions, very detailed and informative.

In one of the annexes of the SER, the contents of the study modules are described and structured according to the Study Programme's learning outcomes. This makes the curriculum design, in principle, transparent and a good instrument to see and ensure that the Programme's learning outcomes are reflected in teaching, studying and learning even at the course/module level.

However, there are some irregularities in the study module descriptions. In seven study modules out of the 47 altogether, some the learning outcomes are not connected to any category of the Study Programme's learning outcomes:

- Foreign Language (English B2)
- Philosophy
- Higher Mathematics 3
- Basics of Port Engineering
- Electrical Engineering and Electronics
- Hydromechanics
- Introduction to Maritime Law and Insurance.

Because of this, it is recommended that KU should update the module descriptions to correct any irregularities between the learning outcomes of the study modules and the study programme. This would be in line with the University's stated principles to *form study subjects that are appropriate for the achievement of the intended learning outcomes*, as expressed in the SER.

The SER's chapter on Curriculum Design does not give a very clear picture how the content of the programme reflects the latest achievements in science. It is mentioned that the subject topics are related to current events and are sufficiently detailed and based on the research of the teaching staff and new publications. On the other hand, the SER's Table on the study programme's learning outcomes (Knowledge and Understanding, A1-A5, Engineering Analysis, B1-B5, Engineering Design, C1-C4, Investigations, D1-D4, Engineering Practice, E1-E4 and Transferable Skills, F1-F6) includes at least one area in which the study programme's relation to the latest achievements in science could be covered, namely A1, *knowledge and understanding of the scientific and mathematical principles of sea port engineering*.

However, the analysis of the SER annex on the study subject modules revealed that in none of the study modules' learning objectives, the wording of the text referred to the latest achievements of science. The analysis was then deepened to the whole text of the study module descriptions. The only reference to the latest achievements of science could be seen in the study module *Management* (*Syllabus, Sections and Themes 4,* **Elements of modern management science**).

According to the Law on higher education and research, 30 April 2009 No XI-242, *Article 48. Requirements for study programmes awarding a degree and doctoral studies*,

> study programmes of the first cycle shall be designed to foster general erudition, to provide the theoretical basis of a study field and to form professional skills necessary for independent work.

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University study programmes shall be more oriented towards universal general education, theoretical preparation and professional capacity of the *highest level*, while college study programmes shall be more oriented towards preparation for professional activities.

Despite the fact that scientific activities are less predominant in the first cycle study programmes in comparison to the second cycle study programmes, it is justified to expect that the latest achievements of science are utilised in the design and delivery of first cycle study programmes at the University level. Therefore, it is recommended that the latest achievements of engineering and other relevant sciences are always observed and taken into consideration in the design and delivery of the Sea Port Engineering study programme. This should also be addressed and highlighted in relevant documents and procedures that may comprise, e.g. the study module descriptions and relevant sections of the QMS (Quality Management System).

3. Staff

According to the SER, during the period of 2011-2012 the teaching staff of 29 persons comprised - in addition to optional general education and elective subjects - three professors, 11 associate professors or doctors, 12 lecturers, and three assistants. Furthermore, 54% of contact hours and 49% of independent work hours are delivered by teachers with academic degrees, which correspond to the general requirement regulation for the degree-awarding undergraduate and integrated study programmes, when at least half of special training subjects have to be delivered by scientists. Thus, the study programme is provided by teaching staff meeting legal requirements, taken also the further analysis of the SER and its annexes on the teaching staff into consideration.

However, it is noticeable that within the three 5-credit Specialty Subject Alternatives, the amount of teaching given by non-scientists varies depending on the student's choices. For example, in the second semester the students are offered four 5-credit options to choose from as their specialty subject alternative. Out of these four options, two (Planning of Port Terminals and Introduction to Maritime Law and Insurance) are given by a non-scientist. The same situation is repeated in the specialty subject alternatives during the third and fourth semester. Therefore, it is advisable to consider encouraging the non-academic teachers to start graduate studies to take a suitable University Degree.

In terms of qualifications, the SER's list of the study programme' academic staff reveals that there are 16 (according to the CV's, 17) persons with a Doctoral degree. The degrees of the other persons were not reported but according to the individual CV's, the degrees or education are distributed as follows:

Masters   12
Polytechnic degree   3
University education   5

Three of the Masters are currently doing their Ph.D. studies. Furthermore, five persons have mentioned a university education but not a degree. These persons had the following education:

- Biochemist
- Ships the engineer
- Shipbuilding and –repair Engineer
- Doctoral Education
- Lithuanian language and literature, teacher qualifications

In the CV´s, the teaching staff have listed their improvement of qualification in recent 10 or 5 years. It was possible to analyse the CV´s to make a survey on the forms of improvement and the number of persons having participated:

- scientific conferences   23
- international scientific projects   13
- study projects   9
- scientific internships   7
- seminars   17
- academic exchanges   3
- seminars and workshops   3
- research projects   3

It can be seen from the figures that the most usual forms of improving qualifications have comprised *scientific conferences*, *seminars* and *international scientific projects*. However, participation has not been comprehensive because the teaching staff amounts to 29 persons. Furthermore, participation of different persons in, e.g. scientific conferences varies from one to 16 conferences. Secondly, there are some forms of improvement that have been participated by very few persons, especially academic exchanges. According to the SER, only three persons have participated in international mobility during the years 2010 – 2012.

Many *study projects* of the teaching staff have dealt with pedagogical and curricular development (e.g. Design and Implementation of New Teaching/Learning Forms and Methods in the Field of Technological Sciences). However, only one fourth (7) of the teaching staff have participated in study projects. The teaching staff should take more comprehensively part in study projects to make pegadogical and curricular development more active and effective.

The CV's do not include any development plans for improvement of the qualifications. Instead, the SER illustrates a general scheme of improving the staff's qualifications and professional development (PD). This comprises attesting the teaching staff every 5 years in accordance to the order established by the KU Senate, in order to oblige consistent growth and raise of qualification amongst the staff. For example, professional development courses and seminars have been arranged on study quality, specialty areas (e.g. Green Propulsion Workshop) and General Competencies (e.g. Personnel Management in Teaching). Teacher mobility is also used as a means to PD. Unfortunately, the information revealed above indicates that there is a considerable amount of variation in the development of qualifications of the teaching staff. Therefore, it might be useful to consider more individualised planning, realisation and monitoring of professional development.

According to the KU Senate decision (11-51 of 2011-05-06), the workload norm of the teaching staff is 700 – 800 academic hours per year. As shown in the SER's Table on the Sea Port Engineering study programme teachers' workload, two persons have an annual teaching workload exceeding the upper limit of the norm by 111 to 112 hours. Reducing the teaching load of the teachers that are actively involved in scientific research work was mentioned in the SER as an area for improvement.

The teaching staff suffices for ensuring the learning outcomes when considering the age structure of the staff presented in the SER. However, the relative weight of teachers in the oldest cohort (over 60 years) has doubled during five years while the relative weight of the two youngest cohorts (under 30 years and 30 – 44 years) has remained more or less at the same level. The situation is not critical at all but the age structure and turnover of the staff should be looked after in the future to maintain the acceptable levels.

As reported in the SER, according to the "State budget allocation of persons admitted to public universities by the year 2009, student finance order description", the number of students per academic staff member for engineering science field study programmes is 12 students. However, in the KU Marine Engineering study programmes, the students' and teachers' ratio in the analysed period of 2007-2012 varied slightly: from 15 to 17 and averaged to 15, i.e. more than the number mentioned the state budget allocation (12). This was the case also in the study year 2011/2012 when there were about six main Seaport Engineering programme supervising teachers per 89 students.

Despite the fact that for obvious reasons, it is not possible to state the student and teacher ratio exactly in practice and the provided figures are therefore more of the illustrative nature, as explained in the SER, it is recommended that the Department should periodically make a more extensive review of the situation and take remedial action if necessary.

As earlier discussed, participation in research projects and international scientific conferences is distributed unevenly from person to person. There are some persons that have participated significantly less or not at all in comparison to their colleagues. Their teaching workload alone cannot explain this because according to the SER, their teaching workload is under the workload norm. On the other hand, some of the teachers are visiting ones that may have different prerequisites for taking part in the scientific activities. As such, it can be regarded highly that visiting teachers are used in the Sea Port Engineering Programme since they can readily transmit current information from the working life and at the same time, may get interested in full-time teaching later during their careers.

To sum up, there should be encouragement and support for making the teaching staff's participation in mobility, research projects and other scientific activities more extensive.

As a rule, the teachers are involved in research directly related to the study programme, as can be seen from the teaching staff's CV´s (e.g. Logistics - V. Paulauskas, Management – D. Burgis and Electrical Engineering – V. Jankunas). However, in some cases the information on research projects is insufficient in the SER's main document to evaluate fully how the listed projects relate to the study programme and whether they are primarily research projects or at least partially development projects. Maintaining a comprehensive cross-table between the study programme´s study subjects and the related research activities of their responsible teachers could be useful in monitoring the scientific base of the tuition in each subject, as well as the relevance of the teachers' research activities.

4. Facilities and learning resources

The premises and equipment available for the study programme are suitable in terms of size and quality. The laboratory facilities and their equipment are also good. In addition, KU has a specialised multipurpose navigation simulator and intends to use it for Marine engineering studies and research. This modern and versatile system offers new opportunities but at the same time, careful consideration is necessary to ensure that the simulator is applied to activities that conform to the aims and learning outcomes of the study programme.

Furthermore, to use a specialised multipurpose navigation simulator in education, good simulator trainer skills are necessary. It was found out during the site visit that only one of the teachers has obtained adequate training and skills to use the simulator. It is recommended that continuance of this expertise is secured, e.g. by training another member of the teaching staff to become a certified simulator trainer and user.

The teaching materials are adequate and accessible and the students can use the online catalogue, as well as many useful Lithuanian and foreign databases. According to the SER, in 2012 there were 18 databases subscribed by KU, many of which are useful for Seaport Engineering programme students, e.g.: EBSCO Publishing, EDP Sciences, Science Direct, and Springer. However, it was found out during the visit to the University that enlarging the availability of e-books should be considered. What is more, some of the students feel that there are difficulties in finding literature.

Practical training is a characteristic feature of the Sea Port Engineering study programme. The activities of the companies offering places for practical training are related to the study aims and outcomes. According to the SER, the following and other port and maritime transport companies offer places for practical training: Klaipeda State Seaport Authority, Ltd. 'KLASCO', SC Western Shipyard, LK SC 'Klaipedos Smelte', LLC "Bega"; LLC 'Klaipeda Container terminal', and LLC "VP Logistics". Practical training reports are produced by the students.

According to the SER, the number of practical training places has been sufficient and the conditions have been adequate for the intended professional practical tasks. The interviews with students and social partners verified that it is easy to obtain a suitable practice place from the companies and that they are willing to take students for practice and finally, to recruit some of them after graduation. Practical training is one of the strengths of the study programme and is positively commented on also in the forthcoming chapters of this evaluation report.

On the basis of the visit to the premises, expert team suggests that their accessibility for disabled persons should be checked and if relevant national requirements are not fulfilled, the arrangements should be corrected accordingly.

The teaching materials are adequate and accessible since the students can use the online catalogue and many useful databases in Lithuania and abroad. What is more, the teachers prepare and provide the students with tailor-made teaching materials. According to the SER, during the period of 2008-2012 six methodological publications, learning text books and monographs for studies were issued, such as "Marine Technology" and "International Shipping Law". Nine teachers participated in making these six teaching materials. The CV's annexed to the SER reveal that some other teachers have also produced teaching materials, such as "Renewable Energy Sources" by V. Kvedaras.

5. *Study process and student assessment*

As described in the SER, students are admitted according to a national, agreed admission procedure and there is a systematic process and criteria used in selecting the new students. Independence of the admission process is strived for by keeping the Department staff outside the process.

The organisation of the study process has been designed to enable the adequate provision of the programme and the achievement of the learning outcomes. However, the learning methods could be enriched by applying PBL (Problem-Based Learning).

The assessment system of student's performance is systematic and transparent and information about the assessment procedures is made available and accessible during lectures and in the study programme's information system. This was also proved during meeting with teaching staff and students.

According to the SER, There is a versatile range of academic support. For example, the Department staff meets with the first year students at the beginning of the semester to discuss current study issues and acquaint them with the study subject programmes, the literature used and information sources, as well. Furthermore, consulting hours are scheduled and arranged for the students. In addition, the Career Centre is in many ways a good resource for the students. Social support is also taken care of, e.g. by providing dormitories and recreational areas. The Student Representation also contributes to the social support.

The University has noted that the highest student dropout rate emerges after the first year of study. The interviews of the Department's groups showed that this has been addressed by developing the process of signing to studies and furthermore, schedules have been rearranged to ease the students' workload in basic studies. The students were of the opinion that if the students are motivated, they will carry on with their studies.

Financially, there are state-funded study places and secondly, there are scholarships and other financial support that the employers offer, as was described to the team during the interviews.

According to the SER, there is hardly any student mobility in the Sea Port Engineering Study Programme. Recently, only one student has been involved by visiting the Danish Technical University in 2012. The Department's financial situation and the ending of the ERASMUS programme period has affected the possibilities to promote student mobility. Nevertheless, it is recommendable to develop and increase the student mobility.

According to the SER, the students' research and research-related activities are incorporated in, e.g. practical training. This was clarified during the interviews when the representatives of the companies told that they encourage the students doing their practice in the company to research technology that is relevant and useful to the company. The interviews also verified that the teachers give certain directions to selection of the research topics and the initiatives of the students can be negotiated and their research topics can be directed towards a more practical and technical orientation, if necessary.

The interviews revealed that the University does not have a license for software to analyze the students' scientific texts to counteract plagiarism. The teachers can possibly access and use the software in the Kaunas University. Although the KU teachers informed the team about alternative methods, such as multi-step analysis and pre-check of theses, new or unused solutions to counteract plagiarism should be explored and introduced, if applicable.

6. Programme management

As explained in the SER, The University has documented procedures for decisions and monitoring of the study programme. The responsibilities for the programme implementation, monitoring and decision-making have been allocated for the different levels (Faculty and Department). In practice, there are permanent Committees and Commissions for programme management, as well as designated persons to lead these organs.

The University has introduced study quality assurance principles and standards in 2011. Quality thinking, e.g. constant upgrading of the study process, can be seen in various parts of the SER.

Various information and data on the implementation of the programme is collected, such as activity reports, topics of theses, dropout data and practice reports. The team was informed during the interviews that the evaluations based on the students' feedback about the teachers'

teaching skills can be accessed by the students. In addition, feedback on practical training can be given to the University's tutor for taking into consideration. Appropriate steps are taken if the students' feedback indicates a clear need for improvement.

The stakeholders (students, employers and Alumni) are involved in the evaluation and improvement processes as respondents for approved questionnaires. The Student Union's own surveys are also utilised, as well as the students' participation, e.g. in the FME Council. The students confirmed this during the interview and gave an example of contributing successfully to decisions on the interests of the students.

The network between the University and the working life is versatile and contributes significantly to the programme evaluation and improvement processes. One of the key contributing factor is the fact that the graduates are typically employed by companies and organisations situated in Klaipeda and nearby areas. Taking into consideration the information presented in the SER and verified during the interviews, involvement of the stakeholders can be highlighted as one of the strengths of the study programme.

According to the SER, the University has formalised the relations with the stakeholders by using a structured questionnaire and by incorporating the stakeholders into a self-assessment group. Formalised cooperation with the stakeholders could still be developed, e.g. by arranging regular and documented cooperation, as well as thematic surveys on topics such as qualitative and quantitative anticipation of training needs in the field of Sea Port Engineering.

The University has growing prerequisites for good internal quality culture and practice as the quality management system is being expanded and developed to cover all areas of the University's activities. However, the interviews revealed that all the students are not familiar with the University's quality management system. The University should inform the students more actively and regularly about the quality management system, encourage them to give feedback and give the students more information about the steps taken on the basis of their feedback. This would enhance their involvement in developing the study programme. At the same time, it is a question of internal communication in general within the University – there is always room for development in this sense.

III. RECOMMENDATIONS

1. Participation in research projects, international scientific conferences and international mobility should be arranged more comprehensively for the whole teaching staff. In addition, development of the teaching staff's workload, teacher-student ratios and age structure should be monitored carefully and addressed in due time to prevent exceeding the acceptable levels.

2. Student mobility should be enhanced. Secondly, learning methods could be enriched by applying Problem-Based Learning.

3. The students should be informed more effectively about the quality management system.

4. New or unused solutions to counteract plagiarism in Thesis work should be explored and introduced, if applicable.

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5. The accessibility of the premises should be inspected from disabled persons' viewpoint and if necessary, corrected accordingly.

IV. SUMMARY

Programme aims and learning outcomes. This distinctive study programme serves a growing need for Sea Port Engineering professionals and reflects academic requirements, as well as engineering at the first cycle study level. Furthermore, the name of the programme, its learning outcomes, contents and qualification are in harmony.

The programme aims are consistent with the type and level of studies and the level of qualifications offered. Furthermore, the programme aims reflect the academic and professional requirements, public needs and the needs of the labour market. The learning outcomes are well and clearly defined.

A more systematic and formalised process of qualitative and quantitative anticipation of the training needs could be beneficial to scaling the intake of students and development of the study programme.

Curriculum design. The curriculum has been designed according to relevant requirements of the national legislation, as well as internal orders of the University. In terms of credits, the study subjects are spread rather evenly throughout the semesters. Furthermore, the study subjects are appropriate for the achievement of the intended learning outcomes. The curriculum design is systematic and clear and at the level of study subject modules, very detailed and informative. However, there are some irregularities between the learning outcomes of the study modules and the study programme.

Furthemore, it is recommended that the latest achievements of engineering and other relevant sciences are always observed and taken into consideration in the design, delivery and documentation of the Sea Port Engineering study programme.

Staff. The study programme is provided by teaching staff that meet the legal requirements and has a sufficient portion of teachers with academic degrees. The qualifications of the teaching staff are adequate to ensure acquisition of the learning outcomes.

However, there are several areas in which the qualifications of the teaching staff could be improved. For example, there should be encouragement and support for making the teaching staff's participation in international mobility, research projects and other scientific activities more extensive. Furthermore, the development of the teaching staff's workload, teacher-student ratios and age structure should be monitored carefully and addressed in due time to prevent exceeding the acceptable levels.

Facilities and learning resources. The premises and equipment available for the students are mostly sufficient and adequate. The specialised multipurpose navigation simulator is a promising learning resource. Practical training is one of the strengths of the study programme. However, there may be problems in the accessibility of the premises from the point of view of disabled persons.

Study process and student assessment. Students are admitted according to a national, agreed admission procedure and there is a systematic process and criteria used in selecting the new students.

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The organisation of the study process has been designed to enable the adequate provision of the programme and the achievement of the learning outcomes. However, learning methods could be enriched by applying Problem-Based Learning. The assessment system of student's performance is systematic and transparent and information about the assessment procedures is made available to the students.

There is a versatile range of academic support. The Career Centre is also a good resource for the students. The Student Representation also offers social support.

There is only a small amount of student mobility. Another issue is that all possible means to counteract plagiarism have not been explored or introduced.

Programme management. The University has documented procedures for decisions and monitoring of the programme. The responsibilities for the programme implementation, monitoring and decision-making have been allocated at the Faculty and Department levels.

The University has introduced study quality assurance principles and standards. A quality management system to cover all areas of the University's activities is being developed. However, all the students are not aware of the system. This should be addressed.

The stakeholders (students, employers and Alumni) are involved in the evaluation and improvement processes of the study programme. The network between the University and the working life is versatile and contributes significantly to the programme evaluation and improvement. Involvement of the stakeholders is one of the strengths of the study programme.

V. GENERAL ASSESSMENT

The study programme *Sea Port engineering* (state code 612H53001) at Klaipėda university is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process, student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	3
	Total:	**18**

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

Grupės vadovas:
Team leader: Prof. François Resch

Grupės nariai:
Team members: Dr. Markku Karkama

                               Prof. Janusz Uriasz

                               Prof. Jüri Lavrentjev

                               Prof. Artūras Keršys

                               Tomas Žemaitis

                               Justinas Staugaitis

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Santraukos vertimas iš anglų kalbos

V. APIBENDRINAMASIS ĮVERTINIMAS

Klaipėdos universiteto studijų programa *Jūrų uostų inžinerija* (valstybinis kodas – 612H53001) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	3
3.	Personalas	3
4.	Materialieji ištekliai	3
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	3
	Iš viso:	**18**

* 1 - Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)

2 - Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)

3 - Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)

4 - Labai gerai (sritis yra išskirtinė)

<...>

IV. SANTRAUKA

Programos tikslai ir numatomi studijų rezultatai. Ši savita studijų programa tenkina didėjantį jūrų uostų inžinerijos specialistų poreikį ir yra pagrįsta akademiniais reikalavimais, taip pat reikalavimais pirmosios pakopos inžinerinėms studijoms. Be to, programos pavadinimas, studijų rezultatai ir kvalifikacijos dera tarpusavyje.

Programos tikslai atitinka studijų rūšį, pakopą ir kvalifikacijų lygį. Be to, programos tikslai pagrįsti akademiniais ir profesiniais reikalavimais, visuomenės ir darbo rinkos poreikiais. Numatomi studijų rezultatai yra apibrėžti ir aiškūs.

Studijų kokybės vertinimo centras

Priimamų studentų skaičiaus nustatymo ir programos tobulinimo tikslams galėtų pasitarnauti labiau sisteminga ir oficialesnė kokybinių bei kiekybinių mokymo poreikių numatymo procedūra.

Programos sandara. Programa sudaryta laikantis atitinkamų nacionalinių teisės aktų reikalavimų ir universiteto vidaus tvarkos. Kalbant apie kreditus, studijų dalykai nuosekliai išdėstyti per visus semestrus. Be to, studijų dalykai yra tinkami numatomiems studijų rezultatams pasiekti. Programos sandara sisteminė ir aiški, studijų dalykai labai išsamūs ir informatyvūs. Tačiau yra kai kurių neatitikimų tarp studijų programos ir numatomų studijų modulių rezultatų.

Rekomenduojama nuolat sekti naujausius inžinerijos ir kitų susijusių mokslų laimėjimus ir atsižvelgti į juos planuojant, įgyvendinant ir dokumentais įforminant *Jūrų uostų inžinerijos* studijų programą.

Personalas. Studijų programą įgyvendinantis personalas atitinka teisės aktų reikalavimus, yra pakankamai mokslo laipsnį turinčių dėstytojų. Dėstytojų kvalifikacija yra tinkama numatomiems studijų rezultatams pasiekti.

Tačiau keliose srityse dėstytojų kvalifikaciją būtų galima pagerinti. Pavyzdžiui, reikėtų skatinti dėstytojus aktyviau dalyvauti tarptautinio judumo programose, mokslinių tyrimų projektuose ir kitoje mokslinėje veikloje. Be to, reikėtų atidžiai stebėti dėstytojų krūvio, dėstytojų ir studentų santykio ir amžiaus struktūros raidą ir laiku imtis priemonių siekiant išvengti, kad nebūtų viršytas priimtinas lygis.

Materialieji ištekliai. Studijoms skirtos patalpos ir įranga iš esmės yra tinkamos ir jų pakanka. Specialus daugiafunkcis navigacijos modeliavimo įrenginys yra perspektyvi mokymo priemonė. Tačiau gali kilti su patalpomis neįgaliesiems susijusių problemų.

Studijų eiga ir jos vertinimas. Studentai priimami laikantis patvirtintų nacionalinių priėmimo procedūrų, naujų studentų atranka pagrįsta sisteminga procedūra ir reikalavimais (*criteria*).

Studijų procesas organizuotas taip, kad būtų tinkamai įgyvendinama programa ir pasiekti numatomi studijų rezultatai. Tačiau mokymo metodus būtų galima papildyti probleminio mokymo(si) metodu. Studentų studijų rezultatų vertinimo sistema yra nuosekli ir skaidri, informacija apie vertinimo procedūras studentams yra prieinama.

Studijų kokybės vertinimo centras

Akademinė pagalba labai įvairi. Karjeros centras taip pat yra geras pagalbos šaltinis. Socialinę paramą teikia ir Studentų atstovybė.

Studentų judumas labai nedidelis. Dar viena problema yra ta, kad neišnagrinėtos ir neįdiegtos visos įmanomos antiplagijavimo priemonės.

Programos vadyba. Universitetas turi dokumentais įformintas su programa susijusių sprendimų priėmimo ir programos stebėjimo procedūras. Atsakomybė už programos įgyvendinimą, stebėjimą ir sprendimų priėmimą pavesta fakultetui ir katedrai.

Universitetas įdiegė studijų kokybės užtikrinimo principus ir standartus. Kuriama kokybės vadybos sistema, kuri apimtų visas universiteto veiklos sritis. Tačiau apie šią sistemą nežino nė vienas studentas. Šį klausimą reikia spręsti.

Socialiniai dalininkai (studentai, darbuotojai ir absolventai) dalyvauja studijų programos vertinimo ir gerinimo procesuose. Lankstus Universiteto ir darbo rinkos (*working life*) ryšys nemažai pasitarnauja programos vertinimui ir gerinimui. Socialinių dalininkų dalyvavimas – viena iš šios programos stiprybių.

III. REKOMENDACIJOS

1. Visas akademinis personalas turėtų būti labiau skatinamas dalyvauti mokslinių tyrimų projektuose, tarptautinėse mokslinėse konferencijose ir tarptautinio judumo programose. Be to, reikėtų atidžiai stebėti dėstytojų darbo krūvio, dėstytojų ir studentų santykio ir amžiaus struktūros raidą ir laiku imtis priemonių siekiant išvengti, kad nebūtų viršytas priimtinas lygis.

2. Reikėtų didinti studentų judumą. Antra, mokymosi metodai galėtų būti papildyti probleminio mokymo metodu.

3. Studentus reikėtų geriau supažindinti su kokybės vadybos sistema.

4. Reikėtų ieškoti naujų arba dar netaikytų sprendimų, susijusių su kova prieš plagijavimą rašant baigiamuosius darbus, ir, jei tinka, juos taikyti.

Studijų kokybės vertinimo centras