



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

KLAIPĖDOS UNIVERSITETO
STUDIJŲ PROGRAMOS *STATYBOS INŽINERIJA*
(612H20002)
VERTINIMO IŠVADOS

EVALUATION REPORT
OF *CIVIL ENGINEERING* (612H20002)
STUDY PROGRAMME
AT KLAIPĖDA UNIVERSITY

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Išvados parengtos anglų kalba
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DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Statybos inžinerija</i>
Valstybinis kodas	612H20002
Studijų sritis	Technologijos mokslai
Studijų kryptis	Statybos inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (4 m.), iššęstinė (5 m.)
Studijų programos apimtis kreditais	240 ECTS
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Statybos inžinerijos bakalauras
Studijų programos įregistravimo data	Lietuvos Respublikos švietimo ir mokslo ministro 1997 m. gegužės 19 d. įsakymu Nr. 565

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	<i>Civil Engineering</i>
State code	612H20002
Study area	Technological Sciences
Study field	Civil Engineering
Kind of the study programme	University Studies
Study cycle	First
Study mode (length in years)	Full-time (4 years), part-time (5 years)
Volume of the study programme in credits	240 ECTS
Degree and (or) professional qualifications awarded	Bachelor of Civil Engineering
Date of registration of the study programme	19 of May 1997, under the order of the Minister of the Ministry for Education and Science of the Republic of Lithuania No. 565

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The Centre for Quality Assessment in Higher Education

CONTENTS

I. INTRODUCTION.....	4
II. PROGRAMME ANALYSIS	4
1. Programme aims and learning outcomes.....	5
2. Curriculum design	6
3. Staff	7
4. Facilities and learning resources	9
5. Study process and student assessment.....	10
6. Programme management	13
III. RECOMMENDATIONS	15
IV. SUMMARY	17
V. GENERAL ASSESSMENT	19

I. INTRODUCTION

This report presents the findings of an evaluation of the programme *Statybos inžinerija* (state code 612H20002), *Civil Engineering* at Klaipėda University (hereafter – KU). This four year full-time (five years part-time) programme leads to a Bachelor of Civil Engineering qualification. The programme was last reviewed in 2011 and 6 recommendations were made.

The Review Group were furnished in advance with a Self-evaluation Report (hereafter – the SER), dated 2013, which included comprehensive annexes. Further evidence was gathered during a site visit, which took place on 20 February 2014, including updates since the SER was written on planned changes to management structures. Discussions were held with the Dean, senior faculty administrative staff, staff responsible for preparation of the SER, teaching staff, students, alumni and employers. An evaluation was conducted of teaching premises and equipment including library, laboratories, auditoria, and computing facilities (hardware and software). Final projects and other coursework were also reviewed.

The review was conducted in accordance with current regulations and guidance furnished to the Review Group through documentation and training by SKVC. The Review Group was also expertly assisted by Ms. Eglė Grigonytė in discharging its responsibilities to SKVC.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

The aims of the programme are clearly stated in the SER through the inextricable link between the supply of civil engineering graduates and regional / global challenges in respect of sustainable and energy efficient development. It is noted that the increasing regional demand for highly qualified specialists is emphasised in the Klaipėda region strategic development concept and activity plan, accepted by the Governor Administration of Klaipėda County (“Vakarų Lietuva 2025”). Equally the future plans to establish a deep water port in Klaipėda and enlarge oil terminal facilities will grow the need for graduates in civil engineering.

The programme aims are also related to the mission statement of the University “Education of a human and intellectual society: fundamental, applied research; cultivation of educational, cultural, consulting and experimental activity; meeting the specific requirements of Lithuania as a marine nation; sustainability of the cultural identity of the country in the space of the European Union and the global conditions”.

Following the recommendations of the previous review, the programme has been improved to align with regional development plans and Klaipėda Seaport development strategy in compliance with the aim of “training of specialists of the highest competence, scientific research and experimental development, development of science-intensive business in Lithuanian Marine Sector”. This aims to address the needs identified by the University from the industry and business cluster formed at this coastal region, with many enterprises of very diverse profiles related to the shipping and marine economy supported through the Klaipėda Free Economic Zone. Such developments are naturally joined to requirements for civil engineering support. This programme is the only one of its type in Western Lithuania and its need is indicated by strong demand from applicants at about 30 new students yearly and success in graduate placement at a rate of 80%.

The intended learning outcomes were updated in 2010 to conform to European guidelines and national acts. The intended learning outcomes of the programme based on the academic and professional requirements are presented at public KU website: https://web.liemsis.lt/kuis/stp_report_ects.card_ml?p_valkod=612H20002&p_year=2013&p_lang=EN (both in Lithuanian and English languages).

The links between study subjects and the intended learning outcomes in *Civil Engineering* study programme are clearly articulated in the SER. There is a clear relationship between each study subject and intended learning outcomes in respect of knowledge and understanding; competence in analysis and in design; investigation skills (testing, measuring, literature reviews, identification of trends from experimental data, safe working) and engineering practice. These are also supported by transferable skills (communication, logical thinking, problem solving, time management and life-long learning skills). These are fully appropriate as the core attributes underpinning civil engineering studies leading to graduates with sufficient knowledge and competence to commence their professional career under supervision in a company or undertake further studies at master's degree level.

2. Curriculum design

The *Civil Engineering* Bachelor degree study programme is compiled in compliance with the "General Requirements for First Degree and Integrated Study Programmes" (Order of the Minister for Education and Science of the Republic of Lithuania No. V-501, 9 April 2010) and the Study Regulations of Klaipėda University. The scope of the programme is sufficient to ensure the achievement of the intended learning outcomes: at least 166 ECTS out of the total of 240 ECTS are clearly identifiable as field study subjects with at least another 21 ECTS of highly relevant general subjects of great value to a professional engineer. Credits totalling 41 ECTS are identifiable as either elective study subjects, subjects of another field of study, general study subjects, practice or free electives, comfortably below the limit of 60 ECTS. Students have 15 ECTS of practice. The final thesis is valued at 12 ECTS.

Total hours comprise a combination of 2758 contact and 3643 self-study hours. The distribution of these hours is 17.3% for lectures, 25.8% for laboratory work, practical work classes, practice and final project, 56.9% for self-study work. Independent work makes up not less than 45% of each theory subject scope. Generally it is satisfactory, but it is suggested that the percentage of time devoted to lectures should be increased, if possible.

The content and methods of the study subjects are consistent with the type and level of studies and are appropriate for the achievement of the intended learning outcomes. The content of the programme reflects current knowledge and practice. The students receive a good grounding in science and mathematics before developing their knowledge of the relevant engineering sciences. The engineering sciences are studied through mechanics of materials and theoretical mechanics. These combined studies in the first 5 semesters underpin later studies in the application of the basic and engineering sciences through construction mechanics, geotechnics,

hydromechanics and structural design courses in steel, timber, concrete, plastic and composite materials. These engineering topics are supported by subjects in relevant professional practice aspects of graphics, electrical engineering, geodesy, planning, law, safety, organization and management. This prepares students for their final project work in the last semester. In terms of the demonstration of achievement of intended learning outcomes, the intended learning outcomes on investigation and research could be made stronger. This could be addressed in the final degree project by requiring a more evident and distinct analytical section, allowing students to fully demonstrate their independent critical thinking and basic research skills.

In the particular regional context of this programme – part of its justification – the curriculum derived from the programme aims and intended learning outcomes, although it is good, could perhaps further exploit the connection with the regional aims. This is in respect of the regional opportunity presented for producing graduates at bachelor's level with their core engineering education allied to skills with a distinctive marine civil engineering infrastructure bias. The fact that 18% of Lithuanian GDP is created in the marine sector should be a major driver of the distinctiveness of this civil engineering curriculum in Lithuania. The curriculum is good in the overall context of such civil engineering programmes at this level, but the opportunity that is presented by the primary economic drivers of the region and the intellectual capacity of students could be used to further develop more distinctive graduate attributes. This would not involve changes to the study subject framework but could involve the use of marine civil engineering infrastructure as a recurring theme in lectures, case studies and final project topics.

3. Staff

The Review Group was briefed by the Dean about new faculty and departmental structures. This includes mergers resulting in a Faculty of Marine Technology. The Review Group understand that such restructuring inevitably involves re-allocation of resources and conducted its review of staff resourcing in that context.

The staff for the *Civil Engineering* study programme was formed on the basis of the Law on Higher Education and Research (No. XI-242, 30-04-2009), 'On Approval of Minimum Qualification Requirements for the Positions of Staff and Research Fellows of State Science and Studies Institutions', of the Order of Attesting of Academic Staff and Research Fellows in State Science and Studies Institutions, Descriptor of the Order of Attesting and Getting Tenure for Academic Staff, Research Fellows, Researchers at Klaipėda University of KU Senate Resolution No. 11-31 of March 23, 2012. The CVs of the teaching staff, presented in an annex to the SER indicate that the teaching staff of the *Civil Engineering* study programme is well qualified and

are experienced with good practical skills. The staff involved in the delivery of the programme comprises 27, including 3 Professors and 7 Associate Professors. In addition to at least 3 years pedagogical work experience, there is evidence of practical work experience in their subject fields. In accordance with the Minister's Order "General Requirements for First Degree and Integrated Study Programmes", at least half of the subjects in the study field must be taught by academic staff recognised in the specialist field (Ph.D). Analysis indicates at least 119 ECTS being so delivered. The reported student:staff ratio is 22:1. This is high but not above the critical level (sometimes quoted as 25:1 in academic circles). Although 3 staff members have recently retired they have been replaced by staff who are about to defend their theses or have commenced doctoral studies.

In respect of restructuring and future re-allocation of resources, the Review Group would like to draw attention to the fact that the host department of the programme – the Department of Civil Engineering – has a small number of staff members (1 Associate Professor, 5 Lecturers, 2 Assistants) and currently has no professors. Some concern extends to the allocation of departmental resources to the programme from year-to-year in recent years. This can be examined from the viewpoint of workload distribution as presented in the SER. The data indicates a decline from a departmental total of 7.25 to 5.30 from 2010/11 to 2013/14. Typically 55% of the total load is allocated to departmental lecturers and assistants, with no allocation to Professors and just one Associate Professor in recent times. Equally there is a minimal technical staff resource – only 0.5 full-time equivalent. Given these low numbers, the critical mass of researchers in any one area is understandably low with consequent difficulties in providing significant research facilities to such groups or individuals.

In respect of the staff of the Department of Civil Engineering, the information provided in the SER and the CV's of staff indicates a lack of staff mobility. Measures to enhance research support for staff, including encouragement of international collaborations, should be addressed. As a general point such encouragement needs to be done through contractual arrangements at the level of the university, but this is more fundamentally an issue for the Republic of Lithuania. The Ministry for Education and Science needs to consider how best resources can be directed at growing research capacity through revised contractual arrangements in respect of the percentage of workload devoted to teaching in research-intensive universities.

Although the programme itself has good staff resourcing, the structure and scale of the host department seems quite weak. The critical mass of the Department needs to be reviewed by University management. The Review Group trusts that restructuring of the Faculty and

consequent re-allocation of resources will take account of this. Regarding evaluation of resourcing, the issue of this future institutional support to the Department is discussed in Section 6 as a ‘Programme Management’ issue rather than a ‘Staff’ issue in the context of this report.

4. Facilities and learning resources

The SER and evidence gathered during the site visit reveal that the general technical state of some laboratories and classrooms needs improvement. Although a significant challenge exists in respect of effective infrastructure maintenance in older buildings, the Review Group note that there is an on-going investment project for the construction of a new laboratory block at the University campus, where the construction of a new FME building is also planned. Nevertheless the laboratory block and faculty premises currently in use still require significant improvement. Some laboratories are provided with modern equipment, but some (Geotechnics) still lack basic equipment. The premises are equipped with basic furniture for studying, however stationary multimedia and associated sound systems are not yet provided in some auditoria, notably the larger ones.

The premises for studies and complementary activities meet the work safety and hygiene requirements. The classes take place in auditoria, classrooms, 3 laboratories and specialized classrooms. The number of seats in the classrooms and laboratories is sufficient for the programme needs. Two computer rooms with 25 work places are available. Laboratories for the study process used by the Civil Engineering Department have all safety equipment (goggles, gown, gloves and ect.) and guide notes for laboratory work. Students must familiarize with safety rules and sign in the laboratory safety register before starting.

The previous Review Group made the following recommendation: “The University should acquire adequate laboratory equipment and appliances for teaching Geotechnics subjects”. However the Review Group found that this has not been fully addressed and remains a weakness in the development of appropriate graduate attributes for the current cohorts of students. This needs to be rectified urgently and underpins concerns in respect of resourcing to the host Department.

The library and the reading room provide only satisfactory conditions for student independent work. The libraries and reading rooms open hours are from 10 am to 6 pm., the reading room is not provided with computer equipment, thus student must rely on their own notebooks. It is recommended that facilities should be improved in respect of IT equipping in the reading room.

The Review Group found that the Faculty has no clear method to find a practice place for students but that the students feel that their own efforts can adequately address this issue. They can choose their practice place themselves and some of them are already working in companies. Nevertheless it is a matter worthy of further consideration by the study programme management team.

Stocks in the University library and reading rooms are generally sufficient. Students and staff may use the electronic catalogue, which is accessible through Internet. This catalogue is expanding each year and accounts for 80% of the library funds.

The methodical material for the programme is sufficient. The teachers have prepared the methodical materials on their subjects and send them to the students by e-mail. Students have no university e-mails. The Faculty uses an e-learning system from which students can find their timetables, methodical material for study subjects and study process changes.

Computer classes are adequate both in their size and quality. Computers are provided with updated software for basic skills and special software for Civil Engineering subjects, such as MatCad, MatLab, OrCAD, Solid Works, Cosmos Works, Autodesk Inventor. Further resources from the Bentley Systems suite has recently become available. It is noted that students can use computer classes for their independent work.

There is Internet connection and wireless Internet access available for students in the faculty.

The University authorities should note that there is no possibility for students with disabilities to get to the laboratories and many other facilities of the study programme.

5. Study process and student assessment

The competition entrance point is weighted on science and language subjects. It is well founded for engineering programmes. Applicants have to complete secondary education and to pass three state examinations or two state and one qualification exam. The competition entrance point consists of the following subjects: mathematics – the major subject, chemistry, Lithuanian and a foreign language. The level subject coefficients were stated as: mathematics – 0.4; physics – 0.2; the Lithuanian language – 0.2, a foreign language – 0.2. As it can be seen from the previous statements, there is confusing information on the subjects between „chemistry“ and „physics“. Despite the Review Group questions during the site visit, it has not been possible to clarify this issue. The achievement range is arranged by main and additional criteria. The main criteria being: secondary education exam grades of the main, the second, the third subjects, and the

average mark of the fourth subject. The additional criteria are: I-III place winners of contests or competitions.

The quality of the intake may, in part, be ascertained from the number qualifying for state-funded study places (minimum qualification standard is determined by the Ministry for Education and Science of the Republic of Lithuania) and by a stable number of enrolled students. The number of students is clearly stated by cohorts, but the dropout rate needs further and deeper attention since it is not analysed by the Faculty in the SER. Considering the knowledge from gymnasium as it is, Klaipėda University should consider ways of improvement in fostering a smooth transition from gymnasium to the Bachelor.

An academic day lasts from 8:20 a.m. till 8:10 p.m. In exceptional cases students can work according to an individual schedule. The schedule for the examination session is compiled by agreement with staff and students. The number of days allotted for preparation for an exam is in proportion to the subject credits. The timetable is approved by the Dean and the Vice-rector for Studies and Science. The examination schedule is approved by the Vice-rector for Studies and Science. The study timetables are clear and the examination session is elaborated with the students.

The study process gives a reasonable provision of the programme and the achievement of the intended learning outcomes. Crossing the learning activities with the intended learning outcomes shows a relatively balanced exposure to each of them. An attention should however be paid to better expose students to research and to further develop their independent thinking competences, in particular regarding the final project which is, so far, restricted to an integrated design exercise not offering any research or innovation perspective.

In addition, a unique 6 ECTS language course is too isolated to develop true language skills. Considering international business activities related to the regional development, Klaipėda University should consider offering some learning activities in English and/or Russian.

Also the attention should be paid that the 'Physical Education' 30h course organized in the first semester is not related to any intended learning outcome and is not credited. Klaipėda University should reconsider either integrating this course in the learning objectives (and then allocate some credits) or removing it, as explained in the ECTS guide: http://ec.europa.eu/education/tools/docs/ects-guide_en.pdf.

The previous review recommended introduction of strategies to encourage a greater number of students to engage in ERASMUS programmes. It is noted that success in this respect is dependent on students' academic achievements in a competitive environment. Despite the promotion by the Department of International Relations, only one student did an ERASMUS exchange in Coventry (UK, 2013). From the interviews, it appears that European standards for recognition and learning agreements are probably not fully implemented and need further attention. As an example of good practice, a student who wants to make an outgoing mobility period should be provided before leaving a learning agreement (usually 30 ECTS) which must be fully recognized, including the scoring, on his/her return.

Klaipėda University is providing a very good level of social support, including scholarships. Klaipėda University owns three dormitories and a priority is given to the students in social needs. Sport and cultural facilities are well developed and students are encouraged to participate. A Career Centre exists and is providing information but its role should be better promoted among the students, also regarding the internships. Student representatives are in place but their active participation to the programme management should be better encouraged and formalized. Surveys are organised, but the students, or their representatives, are not associated to their analysis and in the possible retrofitting actions. During the interviews, the students particularly appreciated the staff openness and availability to discuss students matters.

The assessment is based on a 10 points grading system. It is clear and publicly available (on institutional website). The criteria to assess the final degree project are clearly stated. The final grade is the result of a well justified weighted average (the final grade is divided into unequal compound parts; each part is accounted separately and the final grade points are accumulated on the principle of increasing amounts). An appeal procedure has been implemented and seems satisfactory.

Stakeholders' expectations have been expressed in a regional strategic development plan referring mainly to the port activities. A feasibility study on the training of highly qualified specialists for the marine sector has been conducted by Klaipėda University. Future regional requirements include a lot of civil works and projects. During the meetings, alumni have given very good testimony on the relevance of their skills. There is a clear industrial need for the programme, and the rate of employability is high, though accurate figures should have been provided to the Review Group. Klaipėda University is however encouraged to deepen their collaboration with the stakeholders and to develop a system to trace and mobilize their alumni.

This could perhaps include creating an Alumni Association to develop a University identity and to maintain contact with them.

6. Programme management

The Review Group was briefed by the Dean about new faculty and departmental structures. This includes mergers resulting in a Faculty of Marine Technology. This should not alter the clear structure for the programme involving Programme Co-ordinator, Head of Department, Dean and Faculty Council. A Study Programme Committee is in place. Parallel involvement to the Faculty Council's academic self-governing role is provided by the University's Study Quality Assessment Centre. Although these structures are adequate, they need to be underpinned by a strong host department. As discussed in Section 3, at present the Civil Engineering Department is below the critical mass typically associated with the discipline. The Review Group notes current restructuring of faculties and departments at Klaipėda University. It is recommended that the opportunity be used to enhance institutional support for civil engineering teaching and research in respect of the rate of improvement of facilities and staff resource developments. Progress on the recommendations from the previous review were not fully addressed in a timely manner. This is an indication that programme management with institutional support needs to be strengthened.

A paperless Academic Information System has been rolled out with each student and staff member now in a position to access the information relevant to their needs. A review is conducted every 3 years using data now being captured through the Academic Information System. Student feedback is provided through feedback questionnaires and students are sometimes invited to departmental meetings where particular issues are being discussed. In addition there is a meeting with the Head of Department once per semester. As with many such systems in universities across Europe it can be difficult to get 'buy-in' from students to formal quality assurance systems. The programme management could encourage more effective use of the existing internal quality assurance arrangements by greater use of feedback loops.

Regarding stakeholder involvement, the Review Group was particularly impressed by the students of the programme. They exhibited maturity, strong motivation for their studies and were highly articulate. It is suggested (see Section 5) that the University should create an Alumni Association. Such an association would provide means to harness the energy and expertise of such students when they graduate. This would assist in future proactive participation by

stakeholders in building a strong civil engineering brand for the University and a key strength for regional infrastructure development.

III. RECOMMENDATIONS

1. The programme aims are well stated and provide a distinct regional context for the programme. An opportunity exists through the primary economic drivers of the region and intellectual capacity of students. This is in respect of the regional opportunity presented for producing graduates at bachelor's level with their core engineering education allied to skills with a distinctive marine civil engineering infrastructure bias. The curriculum is good in the overall context of such civil engineering programmes at this level but could further exploit the opportunity that is presented.
2. The curriculum would be enhanced if the intended learning outcomes on investigation and research were strengthened. Students need development of critical thinking skills and ability to conduct independent research. This could be addressed in the final degree project by requiring a more evident and distinct analytical section, allowing students to fully demonstrate their independent critical thinking and basic research skills.
3. The previous Review Group made the following recommendation: "The University should acquire adequate laboratory equipment and appliances for teaching Geotechnics subjects". However the current Review Group found that this has not been fully addressed and remains a weakness in the development of appropriate graduate attributes for the current cohorts of students. This needs to be rectified urgently.
4. It is recommended that facilities be improved in respect of equipping the reading room with IT capability.
5. The University authorities should also note that there is no possibility for students with disabilities to get to the laboratories and many other facilities of the study programme. This should be borne in mind in any redevelopment of facilities.
6. It is recommended that the reasons for low take-up of ERASMUS exchange opportunities be analysed and addressed.
7. Measures to enhance research support for staff in the Civil Engineering Department, including encouragement of international collaborations, should be addressed. As a general point such encouragement needs to be done through contractual arrangements at the level of the university but also is an issue for the Republic of Lithuania.
8. The programme management could encourage more effective use of the existing internal quality assurance arrangements by greater use of feedback loops.
9. The Review Group notes current restructuring of faculties and departments at Klaipėda University. It is recommended that the opportunity be used to enhance institutional

support for civil engineering teaching and research in respect of the rate of improvement of facilities and staff resource developments.

IV. SUMMARY

The programme is the only one of its type in Western Lithuania. It is in strong demand from applicants and graduate placement rates are good. The detailed intended learning outcomes of the programme are well defined. A particular regional economic and societal opportunity exists for producing graduates at bachelor's level with their core engineering education allied to skills with a distinctive marine civil engineering infrastructure bias. Although the knowledge and competences are closely related to the programme aim and objectives, the full exploitation of the programme's relevance to the region's economic, cultural and geopolitical distinctiveness has yet to be fully exploited. The focus in curriculum on investigation and research seem a bit weak. This could be addressed in the final project work by requiring a separate analytical part, allowing students to demonstrate their independent critical thinking and basic research skills.

The staff involved in the delivery of the programme comprise 27 members (including 3 Professors and 7 Associate Professors – 33% of the total). However the host department of the programme – the Department of Civil Engineering – has a small number of affiliated staff members and currently has no professors. Regarding workload allocation to the programme from the Department there has been a decline from 7.25 to 5.30 between 2010/11 and the current academic year. Typically 55% of the total workload distribution across departmental staff (only) is allocated to lecturers and assistants, with no allocation to Professors in recent years. The technical support staff resource only amounts to 0.5 full-time equivalent. Staff mobility is not a strong feature of the Department as well. The critical mass of researchers in any one area is understandably low with consequent difficulties in providing significant research facilities to such groups or individuals. Although the programme itself has good staff resourcing, the structure and scale of the host department seems weak.

The general technical state of some laboratories and classrooms could be better. There is an on-going investment project for the construction of a new laboratory block at the university campus, but the laboratory block and faculty premises currently in use still require significant improvement. Of particular note is the situation regarding geotechnics, identified in a previous evaluation. This matter has not been addressed in a timely manner.

The University provides a very good level of social support. Sport and cultural facilities are well developed and students are encouraged to participate. A Career Centre exists and is providing information. Students particularly appreciate the staff openness and availability.

The Review Group notes current restructuring of faculties and departments at Klaipėda University. It is recommended that the opportunity be used to enhance institutional support for civil engineering teaching and research in respect of the rate of improvement of facilities and staff resource developments.

V. GENERAL ASSESSMENT

The study programme *Civil Engineering* (state code – 612H20002) 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	4
2.	Curriculum design	3
3.	Staff	3
4.	Material resources	2
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	2
	Total:	17

*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:
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Grupės nariai:
Team members:

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Doc. dr. Vaidotas Šarka

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**KLAIPĖDOS UNIVERSITETO PIRMOSIOS PAKOPOS STUDIJŲ PROGRAMOS
STATYBOS INŽINERIJA (VALSTYBINIS KODAS – 612H20002) 2014-05-15
EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-238 IŠRAŠAS**

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Klaipėdos universiteto studijų programa *Statybos inžinerija* (valstybinis kodas – 612H20002) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	4
2.	Programos sandara	3
3.	Personalas	3
4.	Materialieji ištekliai	2
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	2
	Iš viso:	17

* 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

Statybos inžinerijos bakalauro studijų programa – vienintelė tokio tipo studijų programa Vakarų Lietuvoje. Programa yra paklausi tarp stojančiųjų, o ją baigusių absolventų įsidarbinimo rodikliai yra aukšti. Studijų programos numatomi studijų rezultatai yra išsamūs ir aiškiai apibrėžti. Regiono ekonominis ir socialinis potencialas sudaro geras sąlygas rengti inžinerijos bakalaurus, turinčius fundamentalių inžinerijos žinių ir gebančius specializuotis jūrinės statybos inžinerijos srityje. Nors žinios ir kompetencijos yra glaudžiai susietos su programos tikslu ir uždaviniais, vis dėlto, programos atitiktis regiono ekonominiam, kultūriniam ir geopolitiniam savitumui dar nėra visiška. Programoje nepakankamai dėmesio skiriama moksliniams tyrimams. Šią problemą būtų galima spręsti nustatant papildomus reikalavimus studentų baigiamiesiems darbams – viena iš baigiamojo darbo dalių galėtų būti analitinė. Tokiu būdu studentams būtų sukuriamos sąlygos pademonstruoti savarankišką kritinį mąstymą ir mokslinių tyrimų įgūdžius.

Programos vykdyme dalyvauja 27 dėstytojai, iš jų 3 profesoriai ir 7 docentai (33% visų dėstytojų). Vis dėlto, reikėtų atkreipti dėmesį, kad Statybos inžinerijos katedroje, kuri yra atsakinga už programos vykdymą, dirba itin nedaug docentų ir šiuo metu nedirba nei vienas profesorius. Programos dėstytojų darbo krūvis, už kurio paskirstymą yra atsakinga katedra, nuo 2010–2011 m. iki šių akademinų metų sumažėjo nuo 7,25 iki 5,30. Paprastai 55% viso katedros personalo darbo krūvio tenka lektoriams ir asistentams, profesoriai pastaraisiais metais programoje nedėsto. Techninės pagalbos darbuotojų išteklių tesudaro 0,5 viso etato ekvivalento. Dėstytojų judumas taip pat nėra katedros stiprybė. Nei vienos srities mokslininkai (tyrėjai) nesudaro kritinės masės, dėl to sunku užtikrinti tokioms grupėms ar asmenims didesnes mokslinių tyrimų galimybes ir priemones. Nors personalo išteklių bakalauro studijų programai vykdyti netrūksta, Statybos inžinerijos katedros žmogiškiesiems ištekliams, vertinant iš struktūros ir kvalifikacijos perspektyvos, reikėtų skirti daugiau dėmesio.

Bendra techninė kai kurių laboratorijų ir auditorijų būklė galėtų būti geresnė. Aukštoji mokykla vis dar įgyvendina investicinį projektą, skirtą naujo laboratorijų korpuso statybai, tačiau šiuo metu eksploatuojamo laboratorijų korpuso ir fakulteto patalpų būklė būtina gerinti. Ypatingas dėmesys turėtų būti skiriamas geotechnikos laboratorinei įrangai. Ši programos silpnybė vis dar liko nepašalinta po ankstesnio išorinio vertinimo.

Universiteto teikiamos socialinės paramos lygis – aukštas. Sporto ir kultūrinės veiklos bazė – gera. Studentai skatinami dalyvauti šiose veiklose. Aukštojoje mokyklose yra įsteigtas Karjeros centras, kuris teikia informaciją reikiamaiais klausimais. Studentai ypatingai vertina programos akademinio personalo atvirumą ir prieinamumą.

Ekspertų grupė atkreipė dėmesį į šiuo metu vykstantį Klaipėdos universiteto fakultetų ir katedrų pertvarkymą. Rekomenduojama pasinaudoti šia galimybe padidinant institucijos paramą statybos inžinerijos studijoms ir mokslinių tyrimų vykdymui – atnaujinant materialiąją bazę ir padidinant akademinio personalo skaičių.

III. REKOMENDACIJOS

1. Pirmosios pakopos studijų programos *Statybos inžinerija* tikslai yra gerai suformuluoti ir suteikia programai išskirtinumo orientacijos į regioną atžvilgiu. Programos vykdymui didelės įtakos turi atitikimas regiono ekonominiams poreikiams ir intelektualiai studentų gebėjimai. Regiono aukštajai mokyklai būdingas potencialas rengti bakalaurus, kurių pagrindinis inžinerinis išsilavinimas būtų susijęs su jūrinės statybos inžinerijos sritimi. Studijų programa yra tinkamai sudaryta, žvelgiant iš šios pakopos statybos inžinerijos

- studijų programų konteksto perspektyvos, tačiau minėtoji orientacija į jūrinę statybos inžineriją galėtų būti dar labiau pabrėžiama.
2. Siekiant tobulinti studijų programos turinį, reikalinga daugiau dėmesio skirti numatomų studijų rezultatų formuluotėms, kuriose aiškiai atsispindėtų tyrinėjimų ir mokslinių tyrimų dimensija. Būtina ugdyti studentų gebėjimą kritiškai mąstyti ir savarankiškai atlikti mokslinius tyrimus. Tai būtų galima pasiekti nustatant tam tikrus reikalavimus studentų rengiamiems baigiamiesiems darbams – baigiamojo darbo analitinė dalis turėtų būtų aiškesnė ir išskirtinesnė. Atitinkamai tai suteiktų studentams galimybę pademonstruoti savarankiško kritinio mąstymo ir mokslinių tyrimų vykdymo įgūdžius.
 3. Ankstesnio išorinio vertinimo metu ekspertų grupė pateikė tokią rekomendaciją: „Universitetas turėtų įsigyti tinkamą laboratorinę įrangą ir reikiamus prietaisus su geotechnika susijusių studijų dalykų dėstymui.“ Vis dėlto, šios ekspertų grupės vizito metu paaiškėjo, kad rekomendacija nebuvo visiškai įgyvendinta, todėl šiuo metu studijuojantys studentai vis dar neturi galimybės įgyti reikiamų įgūdžių. Minėtąją problemą būtina spręsti skubiai.
 4. Rekomenduojama tobulinti materialiuosius išteklius – sudaryti galimybę skaitikloje naudotis informacinėmis technologijomis.
 5. Atsakingi aukštosios mokyklos asmenys turėtų atkreipti dėmesį į tai, kad neįgaliesiems nėra sudarytos sąlygos patekti į laboratorijas, taip pat į daugelį kitų patalpų, skirtų šios studijų programos vykdymui. Į tai reikėtų atsižvelgti kiekvieną kartą atnaujinant materialiąją bazę.
 6. Rekomenduojama išnagrinėti itin nedidelio ERASMUS mainų programos populiarumo priežastis ir spręsti šią problemą.
 7. Reikėtų imtis priemonių stiprinti paramą mokslinius tyrimus atliekantiems Statybos inžinerijos katedros darbuotojams, įskaitant tarptautinio bendradarbiavimo skatinimą. Visų pirma, turėtų būti skatinama universiteto lygmeniu per sudaromas darbo sutartis, tačiau kartu tai yra ir Lietuvos Respublikos turimos teikti pagalbos objektas.
 8. Už programos vadybą atsakingi asmenys turėtų skatinti efektyviau taikyti šiuo metu egzistuojančias vidinio studijų kokybės užtikrinimo priemones, aktyviau pasinaudojant grįžtamojo ryšio teikimo cikliškumu.
 9. Ekspertų grupė atkreipė dėmesį į įvykusią Klaipėdos universiteto fakultetų ir katedrų pertvarką. Rekomenduojama pasinaudoti šia galimybe siekiant didesnės paramos statybos inžinerijos studijoms ir mokslinių tyrimų vykdymui, t. y. sparčiau tobulinti materialiuosius išteklius ir didinti kvalifikuoto akademinio personalo skaičių.

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Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso¹ 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

¹ Žin., 2002, Nr.37-1341.