



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Klaipėdos valstybinė kolegija
STUDIJŲ PROGRAMOS STATYBA (*valstybinis kodas –
653H21003*)
VERTINIMO IŠVADOS

EVALUATION REPORT
OF CONSTRUCTION (*state code - 653H21003*)
STUDY PROGRAMME
at Klaipėda State College

Experts' team:

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Išvados parengtos anglų kalba
Report language – English

Vilnius
2016

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Statyba</i>
Valstybinis kodas	653H21003
Studijų sritis	Technologijos mokslai
Studijų kryptis	Statybos inžinerija
Studijų programos rūšis	Koleginės studijos
Studijų pakopa	Pirmoji studijų pakopa
Studijų forma (trukmė metais)	Nuolatinės (3) Ištęstinės (4)
Studijų programos apimtis kreditais	180 ECTS
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Statinių konstrukcijų inžinerijos profesinis bakalauras
Studijų programos įregistravimo data	2003 Gegužės 29 ISAK- 762

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	<i>Construction</i>
State code	653H21003
Study area	Technological Sciences
Study field	Civil Engineering
Type of the study programme	College studies
Study cycle	First cycle studies
Study mode (length in years)	Full time (3) Part time (4)
Volume of the study programme in credits	180 ECTS
Degree and (or) professional qualifications awarded	Professional Bachelor in Structural Engineering
Date of registration of the study programme	No. ISAK-762 of May 2003

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The Centre for Quality Assessment in Higher Education

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I. INTRODUCTION

1.1. Background of the evaluation process

The evaluation of on-going study programmes is based on the **Methodology for evaluation of Higher Education study programmes**, approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC).

The evaluation is intended to help higher education institutions to constantly improve their study programmes and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.*

On the basis of external evaluation report of the study programme SKVC takes a decision to accredit study programme either for 6 years or for 3 years. If the programme evaluation is negative such a programme is not accredited.

The programme is **accredited for 6 years** if all evaluation areas are evaluated as “very good” (4 points) or “good” (3 points).

The programme is **accredited for 3 years** if none of the areas was evaluated as “unsatisfactory” (1 point) and at least one evaluation area was evaluated as “satisfactory” (2 points).

The programme is **not accredited** if at least one of evaluation areas was evaluated as “unsatisfactory” (1 point).

1.2. General

The Application documentation submitted by the HEI follows the outline recommended by the SKVC.

1.3. Background of the HEI/Faculty/Study field/Additional information

Klaipėda State College (Klaipėdos valstybinė kolegija, or KVK for short) focuses on study programmes with a practical orientation and leading to a profession, mainly professional bachelor degrees. It has a clear organisation into three faculties: the Faculty of Social Sciences, the Faculty of Technology and the Faculty of Health Sciences. The institution uses in recent documents the English term “Klaipėda State University of Applied Sciences” rather than “College”, a choice that shows ambition. The same ambition can be seen in the strategic action plan 2013-2015: KVK’s vision is that it is “The largest higher education institution in Western Lithuania”. The professional bachelor degree in construction under consideration is one of the nine study programmes offered by the Faculty of Technology. The same or very similar degrees

are offered by other four HEIs in the country. This study programme was evaluated in 2010, given a positive evaluation and accredited for 6 years.

1.4. The Review Team

The review team was completed according *Description of experts' recruitment*, approved by order No. 1-01-151 of Acting Director of the Centre for Quality Assessment in Higher Education. The Review Visit to HEI was conducted by the team on Wednesday 26 October 2016.

1. **Prof. Antonio Rodríguez-Ferran (team leader)** *Professor of the Civil Engineering School, UPC-BarcelonaTech, Spain*
2. **Prof. Robert Jankowski**, *Professor of Gdansk University of Technology, Poland*
3. **Mr. Thibaut Skrzypek**, *Civil servant of the French Ministry of Environment, Energy and Sea, France*
4. **Mr. Liudvikas Vytautas Furmonavičius**, *“Geotechnika”, director, Lithuania*
5. **Ms. Milena Medineckienė**, *student of KTH Royal Institute of Technology. Sweden.*

II. PROGRAMME ANALYSIS

2.1. Programme aims and learning outcomes

Clarity of programme aims and learning outcomes

The programme aims and learning outcomes are very clear and defined in a precise way. The information regarding programme aims and learning outcomes are publicly accessible (http://www.kvk.lt/file/repository/AIKOS_S_2014.pdf). The programme does not intend to train specialists but clearly aims to train profiles able to adapt themselves for a changing sector. Such clarity cannot be found in other study programmes in the same study field of Civil Engineering offered by other universities in the country.

Connection to the academic and/or professional requirements and the needs of the labour market

The relevance of the programme in the described specialization is clear. It is based on the requirements from the industry and it is consistent with the requirements of the labour market. It also gives a lot of chances for students to gain a job after graduation. A regular update of the programme is conducted every two years. Concerning the professional requirements, the programme has clearly identified that practical skills are a key factor to guarantee a perfect adequacy of graduates profile with the labour market. The focus on practical skills is nicely reflected in the curriculum design and in the teaching facilities, especially the laboratories. Such detailed approach is allowed by a regular survey of the professional activity done by the

management team of the programme. Social partners can participate in study programme committee meetings.

Consistency with the type and level of studies and the level of qualifications offered

The learning outcomes are appropriate for the level of first cycle professional bachelor's study programmes. Among others, a method designed by the Tuning academy was used in order to define and assess the learning outcomes, which is an illustration of the European standard quality the programme is set on. This is fully aligned KVK policy: in its strategic plan, one reads that the goal is to offer "top quality and attractive studies with the principles of the European Higher Education Area and the needs of the labour market". A detailed and rigorous description of the documents and tools used to list the competences and skills required by the future graduates is provided in the self-evaluation report.

Compatibility of name, learning outcomes, contents and qualifications of the programme

The global targeted and precise approach of the programme is declined through its name, learning outcomes, content, and qualifications up to the courses description.

2.2. Curriculum design

Compliance with legal requirements

The curriculum design complies with the current legal requirements. The length of this professional bachelor programme is 180 ECTS credits (as required), that is, 3 years for full-time students and 4 years for part-time students. These 180 credits are distributed as follows: 20 credits for general subjects of college studies (requirement: at least 15), 151 credits for subjects in the study field (requirement: at least 135) and 9 credits in elective subjects chosen by students (requirement: at least 9). The subjects in the study field include 36 credits in practical training (requirement: at least 30) and 12 credits for the final thesis (requirement: at least 9).

Layout of study programme

The layout of the programme is reasonable. The contents of the subjects are well defined and give a comprehensive overview of the different aspects related with construction, without unnecessary repetitions. The balance between contact hours and independent work is appropriate for this type of the programme.

Consistency with level of studies

The list of the study subject modules (Annex 1 of the self-evaluation report) is very complete from the technical point of view, but some "soft skills" such are communication skills and conflict management are missing. The subjects are of the level expected in a professional

bachelor's degree. The course papers and final theses inspected during the visit to the HEI are also consistent with the level of studies, and of a quality comparable to international institutions.

Consistency with intended learning outcomes

The contents of the subjects are consistent with the intended learning outcomes of this study programme. Referring to the credit distribution, devoting more credits than the required minimum (36 vs. 30) to practical training is fully consistent with the practical orientation of this professional bachelor. Likewise, a final thesis with more credits than the required minimum (12 vs. 9) reflects the orientation towards applied research.

The type of final theses is also consistent with the intended outcomes. The high graphical quality of the engineering plans is praiseworthy.

Currency of programme content

The programme content is kept up-to-date both from the professional and the academic point of view. On the one hand, the close contact between the programme administration and the local companies is an effective means to ensure that, from a professional / technological / applied point of view, the programme content is up-to-date.

On the other hand, the applied research activity of the teaching staff also ensures the currency of the programme contents from the academic / scientific / research point of view.

2.3. Teaching staff

Compliance with legal requirements

The study programme of *Construction* is provided by teaching staff that meets the legal requirements defined for programmes leading to a professional BSc degree.

Qualifications of the teaching staff

The teaching team is made of experienced staff with practical experience related to the field of construction as well as with many years of experience in teaching (96% of teachers have more than three-year practical and teaching experience in the study subject taught by them). Five teachers (19%) hold a doctoral degree in civil, environmental engineering and informatics. The staff is well prepared to conduct lectures/tutorials in the areas related to civil engineering.

Number, turnover and mobility of the teaching staff

The total number of the staff members involved in the programme is equal to 28. This number is adequate to ensure learning outcomes of the programme of *Construction* as a programme leading to professional BSc degree. The student to staff ratio is acceptable (16.5 to 1). Teaching staff turnover is able to ensure an adequate provision of the programme. The number of outgoing and incoming teachers (usually about 10 persons per year), mainly within ERASMUS programme, is satisfactory.

Research activities of the teaching staff

The staff is involved in applied research in the field of the study. Their scientific achievements include, in the period 2011-2015 and at the international level, 3 papers published in journals listed in ISI Web of Science that are closely related to the study field (International Journal of Strategic Property Management, Energy and Buildings, Journal of Civil Engineering and Management), 9 papers in other international journals (i.e. indexed in international databases and with international editorial boards) and one article in an international conference. These numbers are commendable, but increasing them would contribute to the internationality of the HEI in general and of the study programme in particular.

Conditions for the development of the teaching staff created by the institution

The higher education institution creates the conditions for the professional development of the teaching staff. The institution helps the staff members to develop their skills by participating in conferences, seminars, courses, internships, project activities, preparation of learning aids and giving speeches, which are necessary for the provision of the BSc programme of *Construction*. Attendance to conferences or other events is facilitated by the institution: registration fees are covered by KVK, and classes are either re-scheduled or re-assigned to other members of the teaching staff.

2.4. Facilities and learning resources

Premises for studies

The number and sizes of teaching rooms are very suited to conduct classes. All premises are modern and of good quality. This is a result of two recent renovation initiatives with a total budget 5.05 million euros: during the period 2007-2013, KVK carried out the projects “The Renovation and Development of Infrastructure of the Klaipėda State University of Applied Sciences” and “The Modernization of Transport Engineering Practical Training and Applied Research Infrastructure at Klaipėda State University of Applied Sciences”. The ability of KVK to secure funds to carry out these projects is a telling indicator of the dynamism and ambition of the institution.

Teaching and learning equipment

The teaching rooms are very well equipped with educational aids (i.e. multimedia projectors, blackboards, etc.). The variety and quality of laboratories is impressive, and very well aligned with the expected learning outcomes of this study programme. Two examples: in the Chemistry Laboratory and Construction Materials Laboratory, students learn fundamental chemical concepts and their relevance to the properties of building materials (scientific / technical foundations); in the newly established Construction Laboratory, students build and plaster a

brick wall with their own hands (“learn by doing”, practical orientation). They can also use a number of computer laboratories, which have been recently upgraded (following the remarks from the previous evaluation report of the *Centre for Quality Assessment in Higher Education*). Nowadays, the equipment of these laboratories can be considered as an example to follow from the point of view of quality and quantity.

Students’ practice

The institution offers students possible practice placements with the help of social partners. In total, 36 credit points are assigned for professional activity practices. The arrangements for the practical training internships are very satisfactory, and contribute significantly to the practical orientation of the studies.

Teaching materials

There is a well-equipped library and teaching materials (textbooks, books, periodical publications, databases, many of them in English) are very adequate and accessible. In the computer rooms, modern software is available for a number of purposes, ranging from matrix structural analysis to project management.

2.5. Study process and students’ performance assessment

Admission requirements

The student admission process is clear and well defined. It is commendable that the competitive score for students’ admission was increased and at this time is 1.2. This score ensures the higher level of the students admitted to the programme.

The applicants are rated by the complex competitive score, which includes the results of several subjects like mathematics, physics, and Lithuanian language, among others, and are calculated by the regulated formula. One of the recommendations from the students was to involve in the admission process the motivation letter, which could be used as an additional element for the students who changed their mind while choosing the specialisation.

University gives an additional 1 mark to the competitive score for the students who have graduated with honours or those who have graduated and have at least one year of work experience in the field of study.

The Self-Evaluation Report reflects a small increase in the number of admitted students (for the full-time, as well as for the long distance learning program), which shows the popularity of the program and the interest of students.

Organisation of the study process

The study process is well organised (the schedule regulates the timing of theoretical lectures, practical training, exam sessions, thesis writing and vacation schedule; for laboratory work and

practical trainings students are divided into groups). Courses are usually divided into separate groups of theory and practice; the programme committee decides individually for each case the proportion of theory and practice. Theoretical classes are taught in large lecture halls; classes are scheduled for 4 days a week and one day is given for the students' individual work. The department organizes a flexible schedule for those students who work.

Social partners take part in the final thesis committees and are involved in the study process as consultants.

Students can communicate with the teachers and get all the necessary information about the study course in the "cloud" system Moodle, the annotation of the course, individual assessment. The students are using the new version of this system only for two months now and are facing some difficulties, compared with the previous version.

Participation in research, artistic and applied research activities

Teachers encourage students to participate in applied scientific research competitions and projects, as well as to publish their findings in academic conferences (annual "Business and Technology Insights" applied science conference; international week at Klaipeda State University of Applied Sciences; Erasmus IP projects; conferences of young researchers; professional and other types of competitions). There are university funds available for student participation in such activities.

Students' science association is doing a "small" applied research together with the teachers of the department (e.g. competition "Sustainable environment"). Administration members participate in conferences for the personal skills' improvement (for instance, a recent conference in Seville, Spain, with a seminar on student engagement in market-based applied research).

The university has a robotic and auto-mechanics' club and local student radio. Regarding sport activities, there are aerobics and weight rooms. Students participate in the University's cross-country running competition and sports festivals.

Participation in student mobility programmes

The university organises ERASMUS+ seminars twice a year, where it introduces international student mobility opportunities, news and provides information about the needed documentation. However, the number of outgoing and incoming students is still very low – only 1 or 2 students per year. This situation is caused by a lack of available time by working students, and lack of motivation as well. Other reasons pointed out for very low student mobility are family ties and, above all, the alleged language barrier, especially regarding the technical terms of the studies.

Academic and social support

The information about the study programme is presented in a webpage and also distributed by e-mail. During the first study year, it is explained to students on the special introduction course (adaptation week).

The library staff provides an informative lecture on functions of the library and access to its resources. All the necessary additional books can be ordered at the request of the students. The university has a coordinator from the IT department to assist students about the “cloud” system Moodle.

The alumni association organizes a special meeting with the students, where they talk about their success stories and share their experience.

The department organizes a student survey in order to improve the quality of the study process. The survey results are presented in round-table meetings twice a year. There are two different types of questionnaires: about the study courses (twice a year) and about the teaching quality (once a year).

There is an academic support week, scheduled for retaking the exams and annual career days, which give students an opportunity to learn about career options.

Regarding social support, there are incentives such as single-time scholarships in the institution, as well as loans for paying tuition, living expenses and partial studies.

Assessment system of students' performance

The assessment system of students' performance is clear, adequate and publicly available. The exam grade averages for students in the full time and part-time programmes stay within the 5 to 7 range. The final cumulative grade for a certain subject is calculated using the general formula, which includes semester's assignments and exam grades and their weights.

The self-evaluation report states that, in order to ensure that the assessment is constructive and objective, the teachers provide feedback, discuss learning outcomes and any problems that may arise. The students confirmed this aspect.

The final results of the exams are also presented in the common (shared) internet system.

Professional activities of the graduates

The graduates of the study programme are able not only to work in a variety of companies providing construction services and organisations in the public and private sectors, but also to seek higher education at university higher education institutions. The employment percentage of the graduates is good enough (about 70%). The average employment in the field of study is 88%, which shows that the graduates meet their expectations. The graduates of this course are regarded as high-level professionals, who are prepared as practical specialists in the civil engineering area.

2.6. Programme management

The programme management is done in a rational and clear manner. The internal quality assurance measures are effective and efficient. The quality of the study subject programme is systematically assessed. The updating of the expected learning outcomes is done in consultation with the external stakeholders, mainly industry partners together with the Alumni Club of the Klaipeda State University of Applied Sciences. The goal is to find out the market needs and requirements for the learning outcomes.

The visit to the HEI was planned impeccably and in a very professional manner. The meetings with the self-evaluation report team, the senior administrative staff and the teaching staff clearly illustrated the ambition and dynamism of this institution. All the human groups involved in this study programme (including here also the students, the alumni and the social partners) are on the same page regarding the mission of this professional bachelor degree.

III. RECOMMENDATIONS

1. The international mobility of students (i.e. within the Erasmus+ programme) should be substantially increased. Short stays (1 or 2 months), possibly linked to the final thesis, should be explored to try to attract students deterred, due to family or work commitments, by a full semester stay.
2. Fundamental first-year subjects such as Maths, Physics and Chemistry can pose a significant challenge to those students who completed secondary education a few years ago and are now retaking their studies after a few years of work experience. Introductory courses on these topics are recommended.
3. The study programme is very complete from a technical point of view. However, some “soft” skills are not adequately covered, such as communication skills, including the ability to speak in public, and conflict management. Strengthening these skills in the programme is recommended.

IV. SUMMARY

The assessment of the study programme “Professional Bachelor of Construction” is summarised here in the form of a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats).

Strengths

- This study programme has highly motivated and very mature students.
- The teaching capabilities, motivation and experience of the teaching staff are high.
- The vision of the programme is consistent, the objectives are clear, the relations between the aims and organizational issues are appropriate.
- The faculty has very good connections with the local construction companies. This benefits the programme in a number of ways: the social partners provide practical internship positions and job offers, and help in keeping the programme up-to-date with new technologies.
- The facilities are of high quality.

Weaknesses

- The student mobility within the Erasmus+ programme is rather low.
- The study programme does not cover relevant topics related to communication skills and conflict management.
- There is also a lack of introductory courses of fundamental subjects (Maths, Physics, Chemistry) addressed to aged students that retake their studies some years after finishing their secondary education.

Opportunities

- The institution is well recognized in the country in the field of construction.
- Klaipeda University of Applied Sciences is the only institution in western Lithuania that offers collegiate studies of civil engineering.
- Social partners are happy with the quality and level of the graduates of this study programme, which are needed in the local construction market.
- The employment rate of the graduates is acknowledged as “the best advertisement” and is an illustration of the clear and ambitious aims and learning outcomes of the programme.

Threats

- The current demographics in the country, affected by emigration.
- The competition from other study programmes in similar fields: a similar programme is conducted in other 4 colleges or universities of applied sciences in Lithuania.

V. GENERAL ASSESSMENT

The study programme Construction (state code –653H21003) at Klaipeda State College is given positive evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation of an area in points*
1.	Programme aims and learning outcomes	4
2.	Curriculum design	3
3.	Teaching staff	3
4.	Facilities and learning resources	4
5.	Study process and students' performance assessment	3
6.	Programme management	4
Total:		21

- *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.

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Grupės nariai: Team members:	2. Prof. Robert Jankowski
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