

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

VILNIAUS TECHNOLOGIJŲ IR DIZAINO KOLEGIJA STUDIJŲ PROGRAMOS *STATYBA* (65302T103, 653H21001) VERTINIMO IŠVADOS

EVALUATION REPORT OF CONSTRUCTION (65302T103, 653H21001) STUDY PROGRAMME at VILNIUS COLLEGE OF TECHNOLOGIES AND DESIGN

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Išvados parengtos anglų kalba Report language - English

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Statyba	
Valstybiniai kodai	65302T103 (653H21001)	
Studijų sritis	technologijos mokslai	
Studijų kryptis	statybos inžinerija	
Studijų programos rūšis	koleginė	
Studijų pakopa	pirmoji	
Studijų forma (trukmė metais)	nuolatinė (3)	
Studijų programos apimtis kreditais ¹	120	
Suteikiamas laipsnis ir (ar) profesinė	Statybos inžinerijos profesinis bakalauras,	
kvalifikacija	inžinierius	
Studijų programos įregistravimo data	2002-08-30	

¹ – vienas kreditas laikomas lygiu 40 studento darbo valandų

INFORMATION ON EVALUATED STUDY PROGRAMME

Name of the study programme	Construction
State code	65302T103 (653H21001)
Study area	Technological Sciences
Study field	Civil engineering
Kind of the study programme	College studies
Level of studies	First
Study mode (length in years)	Full-time (3)
Scope of the study programme in national credits ¹	120
Degree and (or) professional qualifications awarded	Engineer, Profesional Bachelor's Degree in Construction Engineering
Date of registration of the study programme	30-08-2002

¹ -one credit is equal to 40 hours of student work

Studijų kokybės vertinimo centras

Centre for Quality Assessment in Higher Education

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I. INTRODUCTION

This report is based on the self evaluation report as well as the information gained during the on-site-visit in December 2010 for the accreditation of the Construction Engineering study programme at the Department of Construction Department of Construction of the Faculty of Construction of the College (state code–65302T103). The report is detailed and comprehensive and does cover all the required fields.

Accordingly the team of experts got a clear insight of the delivery of the programmes in the college from the documents submitted as well as the lively discussions during the visits. All documents and presentations were well prepared and seriously and comprehensively presented. The evaluation of the study programme "Construction (65302T103)" of the College was part of several evaluations of study programmes in the field of construction, building and civil engineering in Lithuania. This gave team of experts an excellent opportunity to view at first hand the state of the education and the delivery of courses in that field in the five study programmes.

In general the quality of the delivery and education is good and adequate to the professional situation in Lithuania. A key issue for all programmes is the question of the setting up and the integration of applied research in the programmes. At the moment there is a clear lack on this level and especially in the field of energy-efficient buildings in general and the specific study-programmes in construction, civil engineering, would be expected to be a vehicle for such work. This would also help to establish this topic as a key aspect for a contemporary education in the field of construction, building and civil engineering.

Another issue that can be applied for all programmes is the necessity of strengthening the teaching of foreign languages, mainly the English language. This is essential to prepare graduates for the international market and for further education of the students. This issue is considered crucial and needs more initiative from all those involved.

From these general issues the panel of experts can envisage a common strategy of the study-programmes in Lithuania emerging in order to ensure the efficient delivery of courses and almost a necessity to establish educational methods of the highest possible quality.

PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

1.1. Programme demand, purpose and aims

1.1.1. Uniqueness and rationale of the need for the programme

The purpose of the programme is not unique and need not be unique. Study programme *Construction* is implemented in other Lithuanian higher schools (e.g. Kaunas, Klaipėda, Panevėžys). Study programme content is similar to all higher schools implementing the programme, though the difference is in a number of credits of separate study subjects (e.g. the subject Construction Works Technology holds 8 credits in the College, whereas the similar subject in Kaunas and Klaipėda holds 7 credits, etc.). Programme comprises the general subjects of the college level studies, the scientific basis of the profession and professional part of knowledge. The college implements the project financed by the EU structural funds: "*Updating of Engineering Study Field Programmes Implementing Innovative Teaching (Studying) Methods*

and Enhancing Internationality", which aim is to unify the study programme Construction on a national scale

"Until 2008 ... construction specialist were in demand in a labour market" write the authors of the self-evaluation report. Due to economic crisis in 2009 the demand for construction engineers in Lithuania has lowered.

The construction study programme demand analysis is presented in Table 2 in SEV. The number of enrolled full time students rapidly decreased in 2009 (105 \div 136 persons in the period 2005 \div 2008, only 49 in 2009) and than increased again t 78 in 2010.

The similar changes of demand are observed in the other colleges.

In 2005-2008 the admission was organized by the College and since 2009 students (full time programme) are admitted according to the general admission to the Lithuanian schools of higher education. On the basis of the "students' survey performed in 2009 and the systematic annual surveys of construction sector employers the authors of SEV consider that there is demand for construction specialists which proves the need of the programme. During the site visit the graduates and employers represented the cautious optimism concerning the demand.

1.1.2. Conformity of the programme purpose with institutional, state and international directives

The purpose of the programme is to provide students with the knowledge and skills necessary for the construction engineer. The programme corresponds with the mission of the College: "to prepare the specialists of the technologies, social sciences and art spheres, who satisfy the demand of Lithuanian labour market...".

The programme is similar to study programmes in other Lithuanian higher schools.

The college implements the project financed by the EU structural funds "Updating of Engineering Study...". The similar programs are carried out in other European countries (Denmark, Tallinn, Reims Maribor...).

The analyzed study programme is not aimed at preparing a speciality regulated by the state.

1.1.3. Relevance of the programme aims

Programme aims and purpose are clearly described in SEV.

The study programme *Construction*, "is aiming at preparation of a construction engineer who is able to plan his activity, organize and technically manage in performing construction works, according to his qualification, make individual decisions, successfully work in competitive market conditions and improve in a professional activity". The correlation between the aims and the purpose of the programme is very good. These aims are in good compliance with the type (college) and the cycle (three years) of the studies.

1.2. Learning outcomes of the programme

1.2.1. Comprehensibility and attainability of the learning outcomes

The main learning outcomes are listed in the paragraph 2.1.1 of SEV. From SEV: "Learning outcomes...are: to be able to prepare the construction part of buildings, to chose construction products according to the requirements for buildings, to chose and apply general construction and repair work technologies, to plan and organize the construction stage, to prepare technology project of construction works, to organize human safety and environment protection on a site, to analyze and prepare documentation of construction works, to prepare the business plan of a construction enterprise...".

"The learning outcomes of the Construction Study Programme and their complexity correspond to the requirements of the European qualification the sixth level structure" write the authors of SEV.

According to SEV learning outcomes are analyzed and constantly examined and improved, according to graduates and other stake holders surveys. It was confirmed by the opinion of graduates and employers during the site visit.

1.2.2. Consistency of the learning outcomes

It seems that the learning outcomes are consistent with the programme. The learning outcomes on the subjects level do not duplicate one another. The correlation between the learning outcomes at the programme level and at the subjects level looks very good.

The example taken from SEV: The learning outcome to prepare a structural part of buildings design is coordinated with the outcome to choose building products according to the requirements of buildings; study outcome to prepare construction works technology project is coordinate with outcomes to apply technologies of general construction and repair works; to plan and organize construction activity.

1.2.3. Transformation of the learning outcomes

According to SEV: "Improvement of learning outcomes is influenced by the tendencies of change... new technologies and innovative work organization methods". Learning outcomes are analyzed according to the labour market demands. Having considered notes and suggestions of social stakeholders, learning outcomes have been analyzed, evaluated and renewed.

For example the content of the subject "Human Safety" was supplemented with the collaboration of the construction industry.

2. Curriculum design

2.1. Programme structure

2.1.1. Sufficiency of the study volume

The study programme complies with the Lithuanian "General technology sciences (engineering) study field regulations" and other documents listed in SEV. The volume of the study meets the requirements of the Lithuanian law acts listed in SEV (page 8). It seems that this volume may be acknowledged as sufficient for the bachelors degree and is similar to the requirements in other countries.

It is solid basis within general separate subject studies, also there is one subject of general knowledge for the engineering systems. It seems, that the software what it used is only Autocad.

There are 4 credits assigned to foreign language and 2 optional credits for professional language skills improvement. However, it was agreed (during the site visit) that there was a lack of foreign language knowledge and this area needs to be improved.

2.1.2. Consistency of the study subjects

The programme presented in paragraph 2.2.2 of SEV and in the Annex 3.1 (STUDY PROGRAMME) seems to be consistent and well ordered.

Every special subject is studied only after theoretical and practical fundamentals of the subject are acquired.

The example taken from to SEV: "General and engineering study subjects provide students with theoretical knowledge and practical skills needed for special studies, e.g. the subject's "Construction Works Technologies" studies start only after completion of subjects: "Building Constructions", "Building Materials", "Engineering Graphics", "Computer Graphics" and "Applied Physics".

2.2. Programme content

2.2.1. Compliance of the contents of the studies with legal acts

Study programme content complies with the "General technology science (engineering) study field requirements" and other documents, listed in SEV. The clear statements of conformity of the study content to the Lithuanian law acts are contained in SEV.

2.2.2. Comprehensiveness and rationality of programme content

Study content consists of:

general subjects (e,g. aimed at providing humanities and communication skills), engineering fundamentals.

general engineering fundamentals subjects (e,g. mathematics, physics, strehth of materials engineering graphics, information technologies),

fundamental study field subjects (e.g. engineering systems of buildings geodesy, geotechnics

social sciences subjects (e.g. legal knowledge and applying them in practicemarketing and management,

special subjects (e.g professional activity practice, preparation and defense of the Final Project).

The overview of the programme given in the Annex 3.1 is prepared solidly and clearly. On this basis it may be recognized that the programme is comprehensive and rational.

It is ongoing project (the leading college is VTDK) regarding to development of rational modular system between three related programs: Construction, Engineering and Geodesy. The aim of the project – to create the mobility system for the college students in Lithuania.

3. Staff

3.1. Staff composition and turnover

3.1.1. Rationality of the staff composition

"Staff is composed according to LR law regulations. Teacher' qualifications conform with the requirements outlined in the general study field description (*General technology science (engineering) study field regulation*) and is enough to fulfil programme aims and outcomes" write the authors of SEV. All teachers have Master's degree in various scientific fields, among them are 4 docents. According to the additional data provided during the site visit 3 teachers have the doctor' degree.

The number of students per one teacher's establishment was from 16,05 to 18,22. (Table No.4 in SEV). Lectures are delivered for a group, consisting of 20-30 students or in flows (usually general subjects, social sciences, optional subjects). Laboratory works and construction works practice is conducted for sub-groups: one group is divided in sub-groups of 10-15 students. Annex 3.2 LIST OF TEACHERS contains 37 persons. From Table 7 follows that the number of students (F+P) equals 556, so the mentioned ratio equals $556/37 \approx 15$. It seems to be rather big number..

3.1.2. Turnover of teachers

Most of the lectures are given by permanent teachers, usually having a lecturer's position. The turnover of teachers is rather small (only social and legal determinants). The change of other teachers (those who work part-time) is related to employment in other working facilities (universities, enterprises, etc.).

According to SEV: "Change of a teaching staff encouraged the renewal and diversity of a study programme applying the new technologies and methods and did not have a negative impact on the study programme during the analyzed period"

3.2. Staff competence

3.2.1. Compliance of staff experience with the study programme

Teaching and practical experience of teachers conforms with the study programme.

The subjects are taught by the specialists of the field, who have pedagogical and practical experience in a particular field. For example: technology science field teachers have 17,5 pedagogical and 6 years practical work experience on average; professional practice is conducted by teachers of technology sciences field with 12 pedagogical and 14,5 years practical work experience on average. The detailed description of pedagogical and practical experience, gained qualification and qualification refresher courses is given in Annexes 3.2 and 3.3.

SEV contains the list of materials prepared and published by the teachers (9 books in the period 2005-2009). In SEV there are also presented many other teacher's activities (participation in various EU programs, expert and consultation activity, organization of conferences).

3.2.2. Consistency of teachers' professional development

All lecturers have master degree. Within site visit it was presented that 2 teachers of doctor degree were acquired (1 within technology and 1 within physics).

System of teachers professional development looks good.

During the analyzed period the teachers prepared or renewed teaching material, which was given the international standard book number (ISBN) (list is outlined in Table 5 in SEV). Teachers annually prepared and published 2-3 articles in Lithuanian and English and delivered the papers in international and republic scientific-practical conferences (the examples in SEV). The results of the scientific activity are reflected in the study programme and appied practically (e.g. during laboratory works, supervising or consulting graduates, preparing final projects, etc.). Part time lecturer (he is also working at Vilnius Gediminas Technical University) participated within soil and foundation engineering research..

Teachers research activity is related to the teaching speciality and other general theoretical engineering fundamentals subjects (e.g. the paper "Influence of Admixtures on the Properties of The Cement Based Foam Concrete", more examples in SEV).

Teoretical subjects teachers and supervisors of practice have enough practical work experience, it conforms with the field and nature of a taught subject. The most experienced teachers are those who teach fundamentals of engineering subjects, special subjects and conducting professional practice.

Teachers prepared project applications which aim at quality of a study programme and participated in various EU programmes and projects, and performed expert and consultation activity (the list of projects in SEV). They participate in the activity of various committies and perform expert activity, organize Republican and International scientific-practical conferences and practical seminars for students and teachers Teachers participate in international projects and events (conferences and meetings), go to internships abroad, apply innovative project work methods (e.g. intensive preparation of a term paper together with Denmark VIA University College, etc.), which encourages internationality of studies, mobility of students and teachers.

4. Facilities and learning resources

4.1. Facilities

4.1.1. Sufficiency and suitability of premises for studies

There are enough premises for implementation of a study programme, studies are implemented in one headquarter of the College (the Central Building).

The software used for data and designing is constantly renewed, legal and modern.

Those who study according to the programme *Construction* use the Central College library which is aimed at individual studies of students of all study fields. The College reading halls consist of 167 places, 47 of them are computerized, there is a possibility to work with laptops. Students use the Central library which works at a convenient time for students:

In the opinion of the authors of SEV the premises and working conditions are sufficient. This was confirmed during the site visit.

4.1.2. Suitability and sufficiency of equipment for studies

Table 6 in SEV shows the list of rooms and laboratories, working places and the used equipment.

The computeriized working places and laboratory rooms and their equipment (e.g. the climate camera; portable ultrasound concrete structure research device; a vibration table; a universal compression press with a software, Schmidt device to establish the strength of a concrete; a universal stretching machine with software; a drying and heating furnaces; a mobile screens; a view projectors, optical theodolites; electronic tachometers; GPS equipment) are in detail listed at SEV. Software used for study implementation is suitable, modern and legal, and is constantly renewed.

For individual tasks students use computers in the College library, a reading hall, at home and in dormitories (about 80% of students have computers at home or in the dormitory; there are optical wires in dormitories, all computers have an Internet access). Students also use modern means for studying of foreign languages – computer equipment and programmes at a Language Learning Centre, which was installed using resources from the EU funds.

According to the self-evaluation report the laboratory equipment and computer hardware and software are sufficient.

4.1.3. Suitability and accessibility of the resources for practical training

There are no detailed data in the report, but there are mentioned the names of the construction enterprises (e.g. "Megrame", "Skirnuva"). Moreover the agreement between the College and the Lithuanian Builders' Association and agreements with various enterprises (e.g. "Megrame", "Montuotojas", "Betonuotojas", etc.) are described in SEV. The good suitability and accessibility of the resources for practical training doesn't raise doubts. Students get enough of practice placements.

Practice is supervised by managers who have practical work experience. During the final practice student gather data and material for the final project. Enhancing implementation of the study programme aims and outcomes, during practice students get the possibility to start and later continue professional activity in enterprises (e.g. about 45% of graduates of the study programme during the analyzed period, got employed in enterprises that belong to the Lithuanian Builders' Association). Summarizing, suitability and accessability of the practical training looks fine.

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4.2. Learning resources

4.2.1. Suitability and accessibility of books, textbooks and periodical publications

There are enough books, teaching materials and other publishings.

There are subscribed the basic Lithuanian periodicals, which are oriented at the modern technologies and innovations in the construction sector. Students use the electronic library catalogue, library funds, the electronic book platform is installed and tried. Students are given passwords to get access to the data bases. Access to the data bases is available from the computerized working places in the College as well as from personal computers (but sometimes the access to different specific software for the students is missing).

This area of College activity may be assessed as good.

4.2.2. Suitability and accessibility of learning materials

The study programme is supplied with the printed and e-published material which is freely available in the College library and reading-halls. The most important textbooks of the study programme are prepared and published in Lithuanian. Teachers constantly prepare and renew teaching materials. In preparation of practical, individual term papers and final projects, students use teaching publishings prepared by teachers.

With the rapid change of construction rules, standards and technologies, there is not enough of the newest teaching literature in Lithuanian (this problem arises to day in nearly all European countries). After the implementation of the project "Renewal of Programmes of an Engineering Study Field Applying Innovative Teaching (Studying) Methods and Improving Internationality" the newest teaching material in Lithuanian will be prepared.

Recapitulating - the present teaching material used in the study programme is modern and constantly renewed.

5. Study process and student assessment

5.1. Student admission

5.1.1. Rationality of requirements for admission to the studies

From 2009 Vilnius College participates in joint admission to Lithuanian higher education institution and is governed by the general provisions of the admission. The competition mark consists of evaluations of the final exams of *Physics*, *Lithuanian* and *Mathematics*. Students do not have to take entrance exams and any special requirements for admission to study.

The influence of the market conditions was raised in 1.1.

5.1.2. Efficiency of enhancing the motivation of applicants and new students

Information about the studies is provided at the College website and informational publications "Where to Study" and "Where to Enter". Information is distributed in the Vilnius Labour Market.

The representatives of the College go to secondary schools, gymnasiums etc. College organizes the meetings and ,open doors" action for presentation the study programme, studying conditions and carreer perspectives.

In order to achieve the study motivation there were organized the introduction to the studies (introduction to the study programme, study schedule, regulatory documents, etc.) and meetings with graduates and other social stakeholders, where the future professional activity was presented in detail.

These actions of College seems to be fruitful.

5.2. Study process

5.2.1. Rationality of the programme schedule

The programme schedule seems to be rational and well organized. The size of groups (up to 40 students) seems to be a little too big.

5.2.2. Student academic performance

The high drop-out rate is the main problem. Every year wastage is about 20-25%, the biggest among the first year students. Various precautionary means are presented at SEV. The construction study is difficult and laborious – the big wastage is normal in the school which tries to maintain the standards.

There is a systematic observation of the students' progress during the semester: there are intermediate checkings of the progress.; means to enhance the progress are foreseen (e.g. additional consultations, individual work with students is organized, etc.).

5.2.3. Mobility of teachers and students

Full-time teachers during the analyzed period participated in mobility activities. Mobility of teachers looks quite good for the regional based school (Table 8 in SEV).

Mobility of students is low (tables 10 and 11 in SEV), there are no students arriving from abroad (problem of language). The most widely used students' mobility programmes were: Erasmus/Socrates, Leonardo da Vinci. According to SEV: "The number of outgoing students is proportional to the finances of mobility of *Erasmus* students, allocated by Educational Support Exchange Fund".. The main problems: insufficient knowledge of a foreign language and limited financial possibilities.

It should be recommended, that first of all College should support the mobility of Lithuanian students going abroad.

5.3. Student support

5.3.1. Usefulness of academic support

In this paragraph of SEV we may find the diversified information concerning: informing about the programme, consultations, counselling on study issues, counselling on career possibilities, individual programmes and possibilities of students to repeat subjects and to retake examinations. These activities seems to be well organized.

5.3.2. Efficiency of social support

Students are given social support. Students interested in sports can go to basketball, volleyball, table tennis, dart, weightlifting, athletics and athletic gymnastics training. The cultural support includes educational visits, lectures in a real suroundings, visits to exhibitions, also student festivities are organized. Detailed description of the social support is given in SEV.

5.4. Student achievement assessment

5.4.1. Suitability of assessment criteria and their publicity

According SEV: "Students' achievement assessment is based on the evaluation system that works on principles of evaluation criteria publicity, objectivity, impartiality, clarity, mutual respect and goodwill". Detailed description of achievement assessment is given in SEV. This seems to be ok.

5.4.2. Feedback efficiency

During the semester there is a constant and intermediate assessment of study results (details in SEV). This looks fine.

5.4.3. Efficiency of final thesis assessment

The Assessment Commission of the final project consists of 5 members. Members of the commission are employers' representatives, one of them is appointed Head of the Commission, a person responsible for implementation of a study programme and a scientist, corresponding with the branch from a university. Final projects are supervised nor only by permanent, but also by invited teachers from a professional activity world.

During the site visit we got familiarized with students' term and graduation papers. Themes and directions of the final project corresponded with the aims of the programme This papers looked fine.

5.4.4. Functionality of the system for assessment and recognition of achievements acquired in non-formal and self-education

This non-formal education was performed in the frames of "An Employer's and His Representative Training Programme" (details in SEV). Thuis looks fine.

5.5. Graduates placement

5.5.1. Expediency of graduate placement

Taking the circumstances into account the graduate placement is quite good and may improve in future (detailed data in SEV, paragraphs 82, 83).

6. Programme management

6.1. Programme administration

6.1.1. Efficiency of the programme management activities

The programme administration (the basic documents, Committee of the Study Programme, the work of the Study Programme Coordinator and other activities, is widely presented in SEV. This looks fine.

6.2. Internal quality assurance

6.2.1. Suitability of the programme quality evaluation

The internal quality assurance is being performed continuously. Suggestions presented by teachers, social stakeholders, graduates and students are taken into account. Department activity reports and Faculty activity reports are prepared. Assessment frequency is determined by the College inner policy of quality. More details in SEV (p. 2.6.2).

Information about the study programme quality evaluation aims, stages, areas, sub-areas criteria, and the evaluation results is announced at the Faculty community and at the College document management system B-NET. Information is also published on the College's website.

This looks fine.

6.2.2. Efficiency of the programme quality improvement

According to SEV: "During 2008-2009 study years, the study quality was improved, unified teaching reuirements for written assignments were prepared, rooms for flow lectures were arranged (with stationary multimedia equipment). In 2008-2009 study years, teachers' qualification was improved (2 teachers studied in doctoral studies, 3 teachers were on internship in social stakeholders' enterprises and foreign learning institutions, 2 teachers participated in courses- training, 2 conferences were organized, 5 teachers read presentations in republican and international conferences, etc.)". This looks fine.

6.2.3. Efficiency of stakeholders participation

Students participate in the ensurance of quality. They provide suggestions and remarks for teachers, supervisors of groups and administration of the Faculty. Members of a Students' Representative participate in the administration of the study programme and quality assurance. Social stakeholders participate in the activity of a study programme team (e.g. a director of a construction enterprise "Naujas fasadas" Ramutis Šaulys, is responsible for industrial placement, material supply and cooperation with social stakeholders). This seems to be ok.

III. RECOMMENDATIONS

General Recommendations:

- R1 beside the given orientation toward practical knowledge, the programmes have to strengthen the scientific development of students, for their further learning activities (Lifelong learning)
- R2 the effectiveness of the teaching of foreign languages within the programmes has to be increased
- R3 the pedagogical approaches have to be systematically evaluated within the school. What forms are performed and what is the method of assessement?
- R4 in the programme the integration between the two groups of students (fulltime and parttime) has to be strengthened, in order to let the two cohorts to share ideas and discuss issues related to their studies. Also it will be good if each P/T can be assigned a personal tutor, if possible, so that he/she can have a point of contact within the college.
- R5 a clear and formalized procedure for the renewal of the practical experience of staff needs to be established in the programme.
- R6 a conclusive agenda of real applied research has to be established and the transmitting into the teaching process needs to be established and assessed on a regular base.
- R7 staff and students mobility has to be increased with special initiatives. This is a general problem within the evaluated programmes in Lithuania and therefore nationwide actions should be initiated.

Specific recommendations:

R8 – Try to and integrate Part Time students with Full Time Students in order to let the two cohorts share ideas and discuss issues related to their studies.

- R9 There seems to be a good support for students to learn foreign languages and there is some mobility of students and staff to other EU partners. However the panel would like to see more efforts put into this to promote more the learning of foreign languages within the course, especially as the college has excellent facilities for this purpose.
- R10 The same can be said about staff and student mobility as this is limited and more efforts should be focused on this aspect to improve it. Staff and students mobility has to be increased with special initiatives. This is a general problem within the evaluated programmes in Lithuania and therefore nationwide actions should be initiated.
- R11 It is recommended that the IT facilities are looked at for improvement and especially Wi-Fi as this seems to be limited throughout the college.
- R12 Feedback from the students indicated that although there is a mechanism for discussing problems with the college administrators through the students association. The panel thinks that this is an important point to be addressed so that students can discuss specific problems with regards to their course directly with their tutors.
- R13 There were no part time students presented during the meeting. It is felt that this was important to judge their feeling towards their course of study.
- R14 The programme is comprehensive and rational, but the graduate's ability to designing of the structure may be rather limited. The programmes of structural mechanics, reinforced concrete structures and steel structures are rather poor, although Vilnius programme looks quite good in comparison with other colleges. It seems that in the short period of studies the greater programme of these subjects is not possible, although it should be noticed that we couldn't find in the programme any information regarding FEM (finite elements method). Today the computer systems based on FEM are popularly used in structural design, also on the basic level (e.g. Autodesk Robot Structural Analysis professional software). The detailed study of FEM and software based on this method exceeds the scope of the college level study but basic information (basic principles of FEM, types and possibilities of professional software, the most popular applications) should be presented in the concise form.

IV. GENERAL ASSESSMENT

The study programme *Construction* (65302T103) is given **positive** evaluation.

Table. Study programme assessment in points by evaluation areas.

No.	Evaluation area	Assessment in points*
1	Programme aims and learning outcomes	4
2	Curriculum design	3
3	Staff	3
4	Facilities and learning resources	3
5	Study process and student assessment (student admission, student support, student achievement assessment)	3
6	Programme management (programme administration, internal quality assurance)	3
	Total:	19

^{*1 (}unsatisfactory) - there are essential shortcomings that must be eliminated

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Team leader:

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Team members: Prof. Per Christiansson

Prof. Michał Knauff

Assoc. Prof. Vaidotas Šarka

^{2 (}poor) - meets the established minimum requirements, needs improvement

^{3 (}good) - the area develops systematically, has distinctive features

^{4 (}very good) - the area is exceptionally good