



STUDIŲ KOKYBĖS VERTINIMO CENTRAS

VILNIAUS TECHNOLOGIJŲ IR DIZAINO KOLEGIJA
STATINIŲ INŽINERINIŲ SISTEMŲ STUDIŲ PROGRAMOS
(65302T104, 65H24001)
VERTINIMO IŠVADOS

EVALUATION REPORT
of *BUILDING ENGINEERING SYSTEMS* (65302T104,
65H24001) STUDY PROGRAMME
at VILNIUS COLLEGE OF TECHNOLOGIES AND DESIGN

Grupės vadovas:
Team leader:

Prof. Dieter Geissbuehler

Grupės nariai:
Team members:

Prof. Rafid Alkhaddar

Prof. Per Christiansson

Prof. Michał Knauff

Assoc. Prof. Vaidotas Šarka

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Report language - English

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DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Statybos inžinerinės sistemos</i>
Valstybiniai kodai	65302T104 (65H24001)
Studijų sritis	technologijos mokslai
Studijų kryptis	statybos inžinerija
Studijų programos rūšis	koleginė
Studijų pakopa	pirmoji
Studijų forma (trukmė metais)	nuolatinė (3), iššęstinė (4)
Studijų programos apimtis kreditais ¹	120
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Statybos inžinerijos profesinis bakalauras
Studijų programos įregistravimo data	Minister of Education and Science of the Republic of Lithuania, Order No. 1514, August 30, 2002

¹ – vienas kreditas laikomas lygiu 40 studento darbo valandų

INFORMATION ON EVALUATED STUDY PROGRAMME

Name of the study programme	<i>Building Engineering Systems</i>
State code	65302T104 (65H24001)
Study area	Technological sciences
Study field	Civil Engineering
Kind of the study programme	College
Level of studies	First
Study mode (length in years)	Full-time (3), Part-time (4)
Scope of the study programme in national credits ¹	120
Degree and (or) professional qualifications awarded	Professional Bachelor of Civil Engineering
Date of registration of the study programme	Minister of Education and Science of the Republic of Lithuania, Order No. 1514, August 30, 2002

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

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I. INTRODUCTION

This report is based on the Self-evaluation report submitted by the academic team at Vilnius College of Technologies and Design as well as the information gained during the on-site-visit in December 2010 for the accreditation of the Construction study programme at the Department of Engineering Systems of the Faculty of Construction of the College (state code–65302T104). The report is detailed and comprehensive and does cover all the required fields.

Accordingly the group 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 “Building Engineering Systems (65302T104)” of the College was part of several evaluations of study programmes in the field of construction, building and civil engineering in Lithuania. This gave the group 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 group 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.

II. PROGRAMME ANALYSIS

Vilnius College of Technologies and Design (hereinafter - VCTD) was established in 2008 after reorganization, when Vilnius Technical College merged with Vilnius College of Construction and Design. VCTD is a state higher education institution providing higher professional education in the study areas of technologies, arts and social sciences, having great experience in specialist training and long - living traditions.

Vilnius College of Technologies and Design consists of four faculties: Faculty of Design, Faculty of Construction, Petras Vileisis Faculty of Railway Transport, and Faculty of Technical Sciences.

The Study programme Building Engineering Systems is implemented in the Faculty of Construction in full-time and part-time study forms.

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

A demand for the program is accounted for through systematic annual surveys of the construction sector. The intake for 2010 is 54 students in total, 27 of which are F/T students.

The numbers over the years look steady and it seems that the demand for such a course and set of skills is rather limited with regards to F/T students. However the number of P/T students follows and economic situation of the Industry which is reflected in the high number in 2008 and then started dipping due to the economic downturn.

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

It is in the Self-evaluation report paragraph 8 stated that "The analyzed study programme is not aimed at preparing a speciality regulated by the state" and in paragraph 9 "The aim of the programme is to provide an engineer of building engineering systems with college education degree, who is able to analyze projecting documentation, manage installation of building engineering systems, organize building maintenance (exploitation and repair) and construction business, take decisions independently, work in competitive market conditions and develop in professional activity" and in paragraph 10 "Oriented at the specialist training for a practical activity, coordinated with requirements of the General technology sciences (Engineering) study field, provisions of a Building Engineering Systems engineer preparation standard."

From the above statements from the Self-evaluation report it looks that the course follows all published regulations with regards to such a programme.

1.1.3 Relevance of the programme aims

These were clearly stated and explained with the document.

1.2 Learning outcomes of the programme

1.2.1 The comprehensibility and attainability of the learning outcomes

A detailed table listing all learning outcomes is included in the document which lists the knowledge and skills acquired by the students undertaking this programme of study. With regards to the Complexity of the learning outcomes it is deemed by the programme team to be compatible with the learning outcomes for such a programme. The design element within the programme is covered in a number of modules, as detailed in Annex 3.1 of the Self-evaluation report.

1.2.2. Consistency of the learning outcomes

It is in the Self-evaluation report paragraph 14 stated, "Subject learning outcomes are coordinated with and formulated according to study programme outcomes." This paragraph of the Self-evaluation report gives some good examples on connection between learning domains.

1.2.3. Transformation of the learning outcomes

In paragraph 16 of the Self-evaluation report examples are given on actions for improvement of learning outcomes such as student influence on Computer Graphics, and study programme committee member suggesting inclusion of Thermodynamics to provide "a deeper knowledge of the professional subjects."

Students' placement is managed through the relationship with the Social partners who provide these places. Placements of 4-9 weeks is provided.

2. Curriculum design

2.1. Programme structure

2.1.1. Sufficiency of the study volume

According to the Self-evaluation report paragraph 17 the "The analyzed study programme is implemented according to the General technology sciences (engineering) study field regulations , building engineering systems engineers' standard , General requirements for study programmes ,

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Study programme provisions and other regulatory acts." This seems OK and conforms to the Ministry's requirements with regards to study volume for such a programme.

H&S induction is given to all students through a special department within the college where they are required to conduct a risk assessment exercise before conducting laboratory work. There is also a subject dealing with Human Safety within the curriculum.

2.1.2. Consistency of the study subjects

The relations and sequence of the study subjects are presented in paragraph 19 of the Self-evaluation report. This seems to make sense. The programme is part of a number of programmes delivered within the college. All programmes are interrelated and have joint teaching in some of the general engineering and social subjects and the programmes will be divided according to specialism.

2.2. Programme content

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

According to paragraph 21 of Self-evaluation report the "Study programme content complies with the General technology science (engineering) study field requirements". In paragraphs 22 & 23 of Self-evaluation report good examples are given of the continuous revision of the programme. The plans for modularization of the program would give good opportunities for flexibility in the future development of the program.

During revision of the Construction and Building Engineering Systems programs further focus should though be put on integration with Construction programs especially regarding common use of building product and process models.

2.2.2. Comprehensiveness and rationality of programme content

New teaching methods like project oriented and problem-based learning are developed. This is positive and should be further encouraged.

3. Staff

3.1. Staff composition and turnover

3.1.1. Rationality of the staff composition

Table 4 in the Self-evaluation report highlights the student to staff ratio, which looks satisfactory.

Permanent members of staff, usually having a lecturer's position, give most of the lectures. The change in lecturers during an academic year is minimum. It is also stated in the Self-evaluation report paragraph 27 that "The number of permanent teachers complies with the general requirements for a study programme. In 2008/2009 24 full-time teachers and 2 invited teachers performed the programme.". This seems OK.

3.1.2. Turnover of teachers

In the Self-evaluation report paragraph 30 it is stated "Each year more and more young and motivated teachers integrate into the pedagogical activities and most often serve as assistants until the certification." The expert group notes this as a good trend.

3.2. Staff competence

3.2.1. Compliance of staff experience with the study programme

A number of staff already holds a doctorate and one member is currently studying for a PhD. It also good as stated in the Self-evaluation report paragraph 32 that the teachers "experience and pedagogical competence conforms with the study programme".

3.2.2. Consistency of teachers' professional development

Refresher courses within the latest 5 years related to teaching subjects are reported for most teachers, (Appendix 3.3 of the Self-evaluation report).

It is reported that there are several research programmes, funded either by the state or the EU, being undertaken in the college. The subjects vary from capacity building to specific research. However this is limited and staff are continuously looking for further funding and collaboration.

Research activities are limited due to the limited demand for the subject. However lecturers do attempt to submit research projects such as on Energy in Buildings but again success is limited. Research output from staff is very limited and also involvement of staff in research is limited. Students are encouraged to submit papers for a college Journal. There is also a student conference, which is organised every year to present student and staff research.

During the meeting with staff it was stated that there is an annual student Conference for students to present their research. Student feedback indicated that the conference is a national conference rather than local one and some students present their work in it. Also it seems that it covers a large number of topics, which are not necessarily related to this programme of study.

There is a formal review process for all lecturers every five years to assess their capabilities and practical development. It is not very clear how this relates to the renewal of the compulsory practical experience that all staff has to possess.

4. Facilities and learning resources

4.1. Facilities

4.1.1. Sufficiency and suitability of premises for studies

Table 6 in the Self-evaluation report shows the list of rooms and laboratories, working places and the used equipment.

There is a programme of renovating the premises including the building infrastructure and IT. It seems that the amounts made available are limited and the expert group were not sure that this is enough to implement the refurbishment programme. However some of the laboratories were recently refurbished and do not need further investment. The same can be said with regards to the teaching rooms.

4.1.2. Suitability and sufficiency of equipment for studies

From Table 6 in the Self-evaluation report it can be seen that there are in total $8+13+13+13+7+8 = 62$ computers in the classrooms. It is also in paragraph 43 stated that "The amount of laboratory equipment is appropriate for the study programme implementation in relation to the number of students (e.g., the engineering systems laboratory is equipped with 25 working places, laboratory works are conducted in subgroups consisting of 10-12 students). The laboratory equipment is modern and appropriate." These resources should be appropriate, which is further supported by data in table 7 in the Self-evaluation report regarding Laboratory Equipment Used for the Study Programme Fulfilment.

It seems that the remote access to resources is limited and Wi-Fi is not widely available to everyone. It is recommended that the IT facilities be looked at for improvement and especially Wi-Fi as this seems to be limited throughout the college. The planned improvements in this aspect need to be implemented urgently.

4.1.3. Suitability and accessibility of the resources for practical training

Students are provided with practical placement through the contacts that the college have with the stakeholders and college graduates. Over the years the college has managed to place most students with a work placement.

The college has large and good laboratory facilities, which include many new apparatus for teaching purposes.

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4.2. Learning resources

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

It is stated in paragraph 48 of the Self-evaluation report that "The study programme is supplied with essential printed and electronic publications (books, textbooks and other publications necessary for the studies) which can be easily accessed at the College libraries and reading halls..... The number of books, textbooks and other publications is sufficient. The library is stocked with 1162 specialized publications with 140 entries for the study programme of Buildings Engineering Systems, i.e. on the average 17 publications were available per one student during the evaluation period" and in paragraph 49 that "The library offers 4 subscription databases: EBSCO Publishing, Oxford Art Online, Oxford Music Online and Oxford English Dictionary. The databases can be accessed from both college and personal computers." The accessibility of learning material is by the expert group assessed to be on a satisfactory level..

Library resources can further be remotely accessed. However most of the Software isn't. The college is working on a project to modernise the IT systems to make resources more accessible remotely.

4.2.2. Suitability and accessibility of learning materials

It is stated in paragraph 50 of the Self-evaluation report that "With the rapid change of construction rules, norms and technologies, there is not enough of the newest teaching literature in Lithuanian."

Concerning the above statement, the course team needs to update this information using resources in other languages such as English. Also from current and past projects within the college more of these resources are being made available to staff.

During the tour of facilities the team were shown excellent library resources with books and journal available in hard and electronic form in different languages. There is also an excellent language centre which is used by students and staff for developing their language skills.

5. Study process and student assessment

5.1. Student admission

5.1.1. Rationality of requirements for admission to the studies

The course team are happy about the number of students admitted to the course.

5.1.2 Efficiency of enhancing the motivation of applicants and new students

In the Self-evaluation report paragraph 55 it is stated that "In order to attract and involve applicants to the study programme, every year representatives of the College go to secondary schools, gymnasiums, vocational schools, senior school children, school leavers and other interested people have conditions to come to the College. During meetings in the College, the study programme, studying conditions and career perspectives are presented. Every year the College participates in exhibitions "Resta" and "Studijos"; the College organizes Open doors for everyone interested in the study programme, a professional bachelor, a teaching programme, career perspectives and learning conditions." This is by the expert team assessed to be a good practice.

5.2. Study process

5.2.1. Rationality of the programme schedule

It is stated in the Self-evaluation report paragraphs 57 and 58 that "The schedule of lectures of the analyzed study programme is composed gradually. Students' weekly contact hours are distributed gradually and on average constitute 28 hours. Schedules are announced in

informational boards and on the College Internet website.... It is composed so that there were lectures of 2-3 subjects." and that "Credits and exams are distributed equally during the whole study period, at the end of an each semester." The expert group assess this arrangement to be satisfactory.

5.2.2. Student academic performance

The wastage of students is acceptable and every year it was about 30%. The biggest wastage is among the 1st year students.

There is no or very little interaction between F/T and P/T students. The expert group advice is that the college try to integrate Part Time students with Full Time Students in order to let the two cohorts share ideas and discuss issues related to their studies. Also it will be good if each P/T can be assigned a personal tutor so that he/she can have a point of contact within the college. A separate self-evaluation for PART-TIME STUDENTS is accounted in the self evaluation report with references to previous part of the self evaluation. This clearly shows the way the course team's perception of how to deal with the two groups of students as separate rather than members of the same team.

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.

5.2.3. Mobility of teachers and students

It is stated in the Self-evaluation report paragraph 60 that "Teachers fulfilling the study programme seek to implement the aims of Bologna process enhancing the mobility of students and teachers. Full-time teachers during the analyzed period participated in mobility activities" and "The most frequent effective forms to encourage teachers mobility were as follows: English language courses were organized and financed by the EU structural funds."

Having stated the above this still seems very limited due to financial and language difficulties and it is considered as a possible area for improvement.

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 expert group 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.

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.

5.3. Student support

5.3.1. Usefulness of academic support

It is in the Self-evaluation report paragraph 62 stated that "Information about the study programme and its changes (e.g. documents regulating the academic activity, agreements on professional activity practice, optional subjects, etc.) are presented in the College Internet website (<http://www.vtdko.lt>), advertising boards, meetings with students and at a Student Representation."... "Students are permanently consulted about the programme issues by Head of the Department, teachers and the Dean's office staff." and in paragraph 64 "Every year students get consultations on career issues." The expert group assess that continuous contacts with students are on a satisfactory level.

It seems that there isn't any or very little interaction between the F/T and P/T students during the time of study. It would be preferred some interaction is facilitated between the two groups. (See also 5.2.2 above.)

There is a special office within the college, which looks after P/T students in case they have a problem and have an urgent issue to be addressed.

Students seem to be unsure about the process of how they can they complete their studies to a Bachelor or MSc degree. They have expressed their dissatisfaction with the process as they have

only one University to access, which offers this type of course, in Kaunas. They also stated that it would be easier to go abroad (such as Denmark) to get a degree or an MSc in a shorter time than doing it at Lithuania.

5.3.2. Efficiency of social support

It is in the Self-evaluation report paragraph 68 stated "Students are given social support. Individualized encouragement, friendly and peer relationship of teachers and students, consultation activity can be named as a psychological support." It is also from the meeting with students assessed by the expert group that the social support is of satisfactory efficiency.

5.4. Student achievement assessment

5.4.1. Suitability of assessment criteria and their publicity

It is in the Self-evaluation report paragraph 68 stated "Students' knowledge, skills and abilities are evaluated by marks from 1 to 10. The subject is accounted if the final assessment is no less than 5 (if a student gained no less than 50% of knowledge, skills and abilities described in the programme)." and in paragraph 72 "The final assessment consists of ranking coefficients according to the assessment fields outlined in a subject's programme (*e.g. intermediate assessment, practical tasks, a student's individual work or an exam, etc.*" and in paragraph 73 "Study programmes, outcomes evaluation order, criteria and requirements are publicly announced on informational stands, by e-mail, etc. Semester knowledge evaluation is recorded in a student's study book and in a statement."

The expert group evaluate assessment criteria and their publicity to be suitable .

5.4.2. Feedback efficiency

Feedback from the students indicated that although there is a mechanism for discussing problems with the college administrators through the students association, there is no mechanism to do this at course level. The expert group 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.

5.4.3. Efficiency of final thesis assessment

It is in the Self-evaluation report paragraph 76 stated "In the outline of preparation of the final project, the general requirements for execution of a final project are given;" and in paragraph 77 "Following aims and outcomes of the study programme, 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." "The final assessment of the Final Project is established at the meeting of Qualification Commission on the general agreement or voting of all its members, evaluating the general assessment of a supervisor, a reviser and members of the Commission, defence, the average of study achievements and a general solution of all members of the Commission." The expert group evaluate efficiency of final thesis assessment to be satisfactory.

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

It is in the Self-evaluation report paragraph 80 stated "Processes of assessment and recognition of outcomes acquired in a non-formal and individual way are based following LR Social Security and Work Minister and LR Health Security Minister Order No. A1-223/V-792, of December 31, 2003 and LR Social and Work Security Minister Order No. A1-140 of May 25, 2007." The expert group judge this system to be adequate.

5.5 Graduate placement

5.5.1. Expediency of graduate placement

It was in the Self-evaluation report paragraph 81 stated "The study programme graduate's placement rate is 100% in 2005, 96% in 2006, 100% in 2007, and 90% in 2008. This shows the labour market demand for specialists who have completed the study programme under analysis. In 2009, a smaller percentage of the study programme graduates (67%) managed to be employed after graduating due to changes in the country's economics and labour market, which resulted in construction works reduction." and in paragraph 82 that "Analysis of graduates' survey shows that in 2005-2009 the average of the employment according the acquired speciality was 90%."

During the employers meeting a number of employers also expressed their satisfaction with the quality of the graduates from this college and their ability at their jobs in preference to other institutions in the region.

6. Programme management

6.1. Programme administration

6.1.1. Efficiency of the programme management activities

It is stated in the Self-evaluation report paragraph 83 that "There are seven members of the study programme Committee. The committee members, their qualifications and distribution of responsibilities are presented in Table 11." Program management activities seem to be efficiently carried through.

There seems though to be limited teamwork between staff and this is something that the expert group feels strongly about. The flow of information within the department is also not visible. It is felt that there is a gulf between staff who recently joined the college and the more senior staff. It is advised that this issue should be addressed and a programme to enhance team work between the staff and the flow of information should be implemented.

6.2. Internal quality assurance

6.2.1. Suitability of the programme quality evaluation

It is in the Self-evaluation report paragraph 84 stated, "Study programme leadership works collegially (personal responsibility is presented at Table 12), initiates student surveys about the study quality, cooperates with teachers of the department, considers suggestions for improvement of the programme. Study programme committee gives suggestions to the Dean; she indicates the discussion of changes of a study programme and approval in the Faculty Board. The improved study programme is supplied for approval at the College's Academic Council" and in paragraph 87 "Comprehensive study programme evaluation is performed preparing the Department activity self-analysis report according to Methodical Recommendations in Preparing the Department Activity Self-analysis Report, confirmed by the College Director Order No. 1-181, April 1, 2009. They are also followed when preparing for a non-formal assessment."

From the above the expert group is satisfied that there are systems in place to monitor quality of the programmes.

6.2.2. Efficiency of the programme quality improvement

It is in the Self-evaluation report paragraph 88 stated, "Having analyzed the results of the inner study programme quality, the programme implementation quality is being improved. Results of the assessed period are outlined in Table 12. [Study Programme Inner Quality Assessment Fields, Ratio and Quality Improvement Results]". The expert group assess the outlined procedure to be adequate.

6.2.3. Efficiency of stakeholders' participation

It is in the Self-evaluation report paragraph 93 stated, "Students of a study programme have opportunities to participate in the quality assurance process for the course. Students provide suggestions and remarks for teachers, supervisors of groups and administration of the Faculty. Yearly students and graduates are surveyed about the study quality." and in paragraph 95 "Social stakeholders influence evaluation and improvement of a programme quality. Yearly social stakeholders are surveyed about the study quality (e.g. survey about application of students' knowledge and practical skills in an industrial placement, etc.). Social stakeholders participate in the Department and committee meetings, evaluation of final projects, give suggestions on renewal of a study programme."

This support was evident during the meeting with the expert group where the social partners and recent graduates were full of praise to the college and its staff. This is one of the strong points of this programme.

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 assessment?
- 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 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. Also it will be good if each P/T can be assigned a personal tutor so that he/she can have a point of contact within the college. A separate self-evaluation for PART-TIME STUDENTS is accounted in the Self-evaluation report with references to previous part of the self-evaluation. This clearly shows the way the course team's perception of how to deal with the two groups of students as separate rather than members of the same team. (5.2.2, 5.3.1)

- 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 expert group 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. (5.2.3)
- 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. (5.2.3)
- R11 It is recommended that the IT facilities be looked at for improvement and especially Wi-Fi as this seems to be limited throughout the college. The planned improvements in this aspect need to be implemented urgently. (4.1.2)
- R12 There seems to be limited teamwork between staff and this is something that the expert group feels strongly about. The flow of information within the department is also not visible. It is felt that there is a gulf between staff who recently joined the college and the more senior staff. It is advised that this issue should be addressed and a programme to enhance teamwork between the staff and the flow of information should be implemented. (6.1.1)
- R13 Feedback from the students indicated that although there is a mechanism for discussing problems with the college administrators through the students association, there is no mechanism to do this at course level. The expert group 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. (5.4.2)
- R14 Students seem to be unsure about the process of how can they complete their studies to a Bachelor or MSc degree. They have expressed their dissatisfaction with the process as they have only one University to access, which offers this type of course, in Kaunas. They also stated that it would be easier to go abroad (such as Denmark) to get a degree or an MSc in a shorter time than doing it at Lithuania. (5.3.1)
- R15 Research activities are limited due to the limited demand for the subject. However lecturers do attempt to submit research projects for funding such as on Energy in Buildings but again success is limited. Research output from staff is very limited and also involvement of staff in research is limited. This may be an area for development. (3.2.2)
- R16 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. (5.2.2)
- R17 During revision of the Construction and Building Engineering Systems programs further focus should be put on integration with Construction programs especially regarding common use of building product and process models. (2.2.1)

IV. GENEREAL ASSESSMENT

The study programme *Building Engineering Systems* (65302T104) 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

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

Grupės vadovas:
Team leader:

Prof. Dieter Geissbuehler

Grupės nariai:
Team members:

Prof. Rafid Alkhaddar

Prof. Per Christiansson

Prof. Michał Knauff

Assoc. Prof. Vaidotas Šarka