

# STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

# PANEVĖŽIO KOLEGIJA STUDIJŲ PROGRAMOS *STATYBA* (65302T107, 653H20002) VERTINIMO IŠVADOS

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# EVALUATION REPORT OF BUILDING (65302T107, 653H20002) STUDY PROGRAMME at PANEVEZYS COLLEGE

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Išvados parengtos anglų kalba Report language - English

# DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Statyba
65302T107 (653H20002)
technologijis mokslai
statybos inžinerija
koleginės studijos
pirmoji
nuolatinė (3)
120
Statybos inžinerijos profesinis bakalauras
2003-01-09

<sup>&</sup>lt;sup>1</sup> – vienas kreditas laikomas lygiu 40 studento darbo valandų

# INFORMATION ON EVALUATED STUDY PROGRAMME

Name of the study programme	Building
State code	65302T107 (653H20002)
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 <sup>1</sup>	120
Degree and (or) professional qualifications awarded	Profesional Bachelor of Civil engineering
Date of registration of the study programme	01-09-2003

<sup>&</sup>lt;sup>1</sup> – 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 submitted by the academic team at Panevezys College 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 Construction Technologies of the Faculty of Business and Technology of the College (state code–65302T107). 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 "Building (65302T107)" 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.

#### II. 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

O Demand for the specialists in the labour market

The Self-Examination Summary indicates that the demand for specialists would slightly increase in the region and in Lithuania within the next years. There is no indication on reflections on the international market, but rather on a close regional market. This regional market is considered "the future students' need". In March 2010 "The evaluation of the Construction Study Programme and demand for specialists" was carried out in the Environment Protection and Construction Department and lead to the conclusion that "the builder's profession is rather appealing on an international scale, as well on our national and regional scale. Despite all these negative indicators which influence the existence of the construction sector rather sharply, some employers forecast, that construction engineers, having graduated from college, should have better placement opportunities for the following five years (50 percent of the employers' opinion)." Together with some regional initiatives the demand in the labour market seems to exist once the economic crisis is passed.

Demand for the programme among applicants

The number of applicants dropped remarkably in 2009, the 1 priority also. This shows that the dependence on the regional market drastically affects the number of students. The number of applicants in 2010 show some increase.

The programme is oriented towards practical activity and therefore is concentrated on Construction. The reason mentioned is a research, which states that "employers emphasize – graduates should understand construction technology, be able to communicate, make independent decisions and work in a team".

The position of the programme among other study programmes

"The only field of the Construction engineering programme implemented in the College is Construction. The necessity of qualifying construction specialists has been confirmed by the results of the carried out research "The assessment of the demand of the Study Programme and qualified specialists". The research has shown that employers emphasize - graduates should understand construction technology, be able to communicate, make independent decisions and work in a team. Whereas, the employers affirmed, that the College students who had done industrial practice in their companies were good at computer literacy, software control as well they were responsible, full of initiative, having good practical skills."

The programme is well placed within the college.

Purpose of the programmes intended for acquiring regulated professions

The civil engineer's profession is not involved in the list of the regulating professions in Lithuania.

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

Correlation of programme purpose with the mission and the development strategy of a higher education institution

The "SELF\_EXAMINATION SUMMARY – Volume-I" shows the conformity with the College mission and vision and the plans of the College strategic guidelines for the year 2009 – 2012. The visit showed that the programme is conforming to the state directives.

The conformity with international directives is underway with the ongoing transformation of the programme to the 2010 regulations.

#### 1.1.3. Relevance of the programme aims

Correlation of the aims with the purpose of the programme

This correlation is stated clearly and explained in the document and the visit gave the reflection on the correctness of these statements:

"The core aim of the Construction\_Study Programme is to train specialists following the law acts of the Lithuanian Republic, applying optimal and safe methods of construction works, coordinating the work of separate subdivisions, controlling the quality of works, as well, planning the construction manager's job, understanding basic cooperation and communication principles, using IT, tackling conservation problems in the building site, being able to make simple designs of the building, using geodesic devices properly, estimating the technical state of the building and, finally, doing repair works."

Compliance of the aims with the type and the cycle of the studies

This is comprehensively stated in the "SELF\_EXAMINATION SUMMARY – Volume-I" and was proven during the visit:

"Construction studies are college ones and of the first cycle (professional bachelor degree). The conformity of the aims of the Study Programme for the first cycle and college studies is defined by the Standard (V professional level) and the Regulation. The Construction Study Programme has been prepared in conformity with the Regulation and the Standard and, of course, following the provisions of the basic, specific professional and full – time study programmes. The graduate of the Construction Study Programme is able to analyse designed documentation, evaluate construction products, plan and organize building/repair works and manage them technically.

Moreover, one can use technical literature, applied IT programs, can also communicate at least one foreign language and has attained management, marketing and environmental knowledge. What is more, the graduate is also in charge of the execution of the requirements of the construction regulations, organization of industrial safety measures and the quality of the carried out jobs, can communicate with subordinates and superior employees. The graduate is able to prepare a technological design, as well make estimations of simple structures, calculate the estimate and make geodesic measurements. Finally, one can set up one's own business, prepare a business (subdivision) plan and the plans of economic activities and analyse economic business environment."

The responsible body of the programme is aware of the issue of strengthening the teaching of foreign languages, see recommendation R2 and R9.

#### 1.2. Learning outcomes of the programme

### 1.2.1. Comprehensibility and attainability of the learning outcomes

Content of learning outcomes

This is clearly stated in the "SELF\_EXAMINATION SUMMARY – Volume-I" with detailed material that lists the learning outcomes. The visit proofed that the content of the learning outcomes are sufficient.

Level of complexity of the learning outcomes

"Since the national qualification structure is only being originated, therefore, at present this programme corresponds to the requirements of the fifth professional education level. The Programme outcomes could correspond to the requirements of the foreseen national level 6, sublevel B qualification structure, which are described as competences. Competences are attained combining theory and practice and self-independent learning."

The visit proofed that the level of the learning reach the above mentioned requirements.

#### 1.2.2. Consistency of the learning outcomes

Learning outcomes at the programme level

The learning outcomes are consistent throughout the Study Programme, which is clearly summarized in table 4 of the "SELF EXAMINATION SUMMARY – Volume-I".

Correlation of learning outcomes of the programme with those of the subject level.

The correlation of learning outcomes with those of the subject level is evident. The remaining issue is the question of transformation into the new intended modularized system.

#### 1.2.3. Transformation of the learning outcomes

Continuous assessment of learning outcomes

Internally the evaluation of the learning outcomes is done in different bodies of the College. The methods are described very generally in the "SELF\_EXAMINATION SUMMARY – Volume-I". The visit showed that evaluation is done seriously with the involvement of different stakeholders.

Reasonable renewal of learning outcomes

The continuous assessment leads to reasonable attempts to renew the learning outcomes.

#### 2. Curriculum design

#### 2.1. Programme structure

#### 2.1.1. Sufficiency of the study volume

Compliance of the study volume with the requirements of legal acts

This is fulfilled, as shown detailed in the Report and proven during the visit.

Compliance of the study volume with learning outcomes

This is fulfilled, as shown detailed in the "SELF\_EXAMINATION SUMMARY – Volume-I" and proven during the visit.

#### 2.1.2. Consistency of the study subjects

Relations and sequence of the study subjects

The clear order is shown in the document, in an overview in table 7 and in the text in the "SELF EXAMINATION SUMMARY – Volume-I" and was

proven during the visit.

Compulsory, elective or free-choice subjects

This is fulfilled, as shown detailed in the "SELF\_EXAMINATION SUMMARY – Volume-I" and proven during the visit. However the question of strengthening the issue of the teaching of foreign languages might need a more elaborate offer in this field.

#### 2.2. Programme content

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

Compliance of the programme content with general requirements for the study programmes This is fulfilled, as shown detailed in the "SELF\_EXAMINATION SUMMARY – Volume-I" and proven during the visit.

Compliance of the programme content with general requirements for the study programmes This is fulfilled, as shown detailed in the "SELF\_EXAMINATION SUMMARY – Volume-I" and proven during the visit.

#### 2.2.2. Comprehensiveness and rationality of programme content

Themes delivered in the subjects

These are comprehensively stated in Appendix – 1 and in an overview in the "SELF\_EXAMINATION SUMMARY – Volume-I" in table 7. The rationality is shown evidently in these documents and the visit proved that the programme is concise.

The issue of strengthening the teaching of foreign languages (see also 1.1.3.) is expressed in recommendation R2 and R9.

Forms and methods used in classes

The teaching in the programme takes advantage of different forms and methods. This issue should be pursued further with the adaption of the programme to the modularized system.

Although the Programme structure and content are coherent, there remains the challenge of the integration of fulltime and part time students in the same curriculum. There needs to be some improvement on this issue, see recommendation R8.

#### 3. Staff

#### 3.1. Staff composition and turnover

#### 3.1.1. Rationality of the staff composition

Qualification of teachers

Lecturers' qualifications are sufficient.

Ratio of teachers and students

Number ratio of teachers and students: 1 to 18, is slightly high, but in the overall view the ratios in laboratory work and practice 1 to 13 max. and 1 to 8 for college graduates is feasible.

Ratio of full time and visiting teachers

Ratio of full-time and part-time teachers is high. Future attempts should lead to a more balanced ratio, to bring in more practical experience.

Distribution of teachers' workload

The distribution of teacher's workload is correctly stated, but the amount of real applied research is at the moment quite low. The existing attempts to strengthen this field have to be continued and expanded.

Number of technical staff

Is sufficient.

#### 3.1.2. Turnover of teachers

Reasons for staff turnover

"In 5 recent years the turnover of the teachers working in the Study Programme was comparatively insignificant."

The visit showed therefore that within the last year that some changes took place and the staff reaches a reasonable average of age. The reasons of staff turnover are "natural" and not forced.

Impact of staff turnover on the study programme

The visit showed that the new staff brings good new inputs into the study programme and that it initiates changes of the way of teaching towards a more contemporary attitude.

#### 3.2. Staff competence

#### 3.2.1. Compliance of staff experience with the study programme

Teaching experience of teachers

The visit showed that today there is a good mixture of experienced and new staff. The new teachers have some teaching experience and are assisted to improve their teaching skills.

Scope of teachers' research<sup>1</sup> (art) activities and correlations with the study programme

There is little activity in that field, see 3.1.1. This needs to be strengthened in the future.

Experience of teachers' practical work

Is sufficient.

Scope of teachers' other activities (expertise, organizational, etc.) and correlations with the study programme

The engagement is sufficient and some correlations with the study programme were mentioned.

#### 3.2.2. Consistency of teachers' professional development

Regulation and promotion of teachers' professional development

The in the "SELF\_EXAMINATION SUMMARY – Volume-I" mentioned "program of pedagogical staff management" gives a good bases and needs to be pursued in the future.

Scope of the professional development and its impact on the study programme

The above mentioned activities are at their beginning and therefore the development should be carefully supervised and assessed.

#### 4. Facilities and learning resources

#### 4.1. Facilities

4.1.1. Sufficiency and suitability of premises for studies

Number and occupancy of premises for studies

The premises for studies are sufficient and suitable.

Technical and hygienic condition of the premises for studies

The technical and hygienic conditions are good.

Working conditions in libraries, reading rooms

The working conditions are good.

#### 4.1.2. Suitability and sufficiency of equipment for studies

Laboratory (art) equipment and appliances

Are sufficient.

Computer hardware and software

Computer hardware and software are sufficient, but the remote access should be improved, see recommendation R10.

#### 4.1.3. Suitability and accessibility of the resources for practical training

Compliance of activities of the institutions for practical training with the aims of the studies Is sufficient.

Ratio of suitable practical training places with the number of students

Is sufficient.

Role of the higher education institution in selecting the sites for practical training

The institution takes the necessary steps to establish a good quality for sites for practical training and makes sure that there are sufficient sites available.

#### 4.2. Learning resources

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

Provision with printed publications required for the study programme

Is sufficient. But there is a lack in publications in foreign languages, see recommendation R11.

Access to methodological publications

Is sufficient.

#### 4.2.2. Suitability and accessibility of learning materials

Provision with methodological publications

Is sufficient.

Access to methodological publications

Is sufficient.

Provision with learning aids

Is sufficient.

#### 5. Study process and student assessment

#### 5.1. Student admission

#### 5.1.1. Rationality of requirements for admission to the studies

Competition and minimum requirements for applicants

"Students are admitted in compliance with the quota defined by College's Academic Council for each study programme. Quota is adjusted with the Ministry of Education and Science."

Special requirements

No special requirements for applicants to Construction study programme are stipulated.

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

Actions of a higher education institution in attracting students capable to study

The college takes the necessary measurements to attract students.

Student motivation enhancement

The college takes the necessary measurements to enhance the motivation of the students.

#### 5.2. Study process

#### 5.2.1. Rationality of the programme schedule

Schedule of the study classes

Consistent, although quite long terms in comparison to international standards, but in accordance to regulations for Lithuanian Institutions for higher Education.

Schedule of the examination session

Consistent.

#### 5.2.2. Student academic performance

Monitoring of student progress and drop-out rate

"At the faculty monitoring of student progress and drop-out rate is implemented on a constant basis. Monitoring and analysis of student mobility and its reasons are performed permanently." This was made evident during the visit.

Students' participation in research

No fundamental participation, initiatives are being started.

#### 5.2.3. Mobility of teachers and students

Scope of teacher mobility and impact on the study programme

Scope of student mobility and impact on studies

Mobility of teachers seems a bit low, but probably for a regional based school normal. The Mobility of students is very low. Not only the outgoing students are a problem, there are no students arriving from abroad! See recommendation R7 and R12.

#### **5.3. Student support**

#### 5.3.1. Usefulness of academic support

Informing about the programme and its changes

Is sufficient.

Student counselling on study issues

Is sufficient.

Student counselling on career possibilities

Is sufficient.

Possibilities to study according to individual programme

Are sufficient.

Possibilities of students to repeat subjects and to retake examinations

Are sufficient.

#### 5.3.2. Efficiency of social support

Psychological, sports, health and cultural support

Is sufficient.

Grants and benefits

Are sufficient.

Provision with dormitories

Is sufficient.

#### 5.4. Student achievement assessment

#### 5.4.1. Suitability of assessment criteria and their publicity

Correlations of criteria with the intended learning outcomes Are consistent.

Composition of the assessment grade
Is consistent.

Publicity of assessment criteria
Is fulfilled.

5.4.2. Feedback efficiencyMethods of feedbackAre consistent.Effect of feedback on student achievementsAre efficient.

5.4.3. Efficiency of final thesis assessment
Requirements for final thesis
Are clearly stated.
Procedure of final thesis assessment
Is clearly stated.
Results of final thesis assessment
Are clearly presented.

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

#### 5.5. Graduates placement

#### 5.5.1. Expediency of graduate placement

Number of employed graduates and reasons of failure to get a placement

Despite the economical crisis the employment rate seems reasonable and hopefully increasing with estimated economical growth.

Correlations of graduate professional activity with the study programme

"The poll of graduates and heads of construction companies showed the strongest points of students of *Construction* study programme: *practical capacities, computer literacy, management of computer programs, and faculty of personal responsibility and enterprising*. The survey showed that young construction engineers lack experience in practical work."

#### 6. Programme management

#### **6.1. Programme administration**

6.1.1. Efficiency of the programme management activities

Composition and functions of the programme management

Are coherent and efficient.

Coordination of collegiality with personal responsibility in decision making

Is coherent and efficient.

Information about programme monitoring

Is sufficient.

#### 6.2. Internal quality assurance

6.2.1. Suitability of the programme quality evaluation

Evaluation as a regular process

Is established and efficient.

Preparation of evaluation parameters, methods and aids

Is sufficient.

Publicity of evaluation process and results

Is sufficient.

6.2.2. Efficiency of the programme quality improvement

Application of evaluation results

Is established and efficient.

Benefit of the actions for quality improvement

Necessary actions are determined and implemented

Dissemination of quality improvement results

Is sufficient.

6.2.3. Efficiency of stakeholders participation

Participation of students in quality evaluation and improvement

Is established and efficient.

Participation of teachers in quality evaluation and improvement

Is established and efficient.

Influence of external stakeholders on the study quality

Is established and efficient.

#### III. RECOMMENDATIONS

#### General Recommendations:

- 1. Beside the given orientation toward practical knowledge, the programmes have to strengthen the scientific development of students, for their further learning activities (Lifelong learning).
- 2. The effectiveness of the teaching of foreign languages within the programmes has to be increased.
- 3. The pedagogical approaches have to be systematically evaluated within the school. This has to include the methods of assessment.
- 4. In the programme the integration between the two groups of students (fulltime and part-time) 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.
- 5. A clear and formalized procedure for the renewal of the practical experience of staff needs to be established in the programme.
- 6. 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.
- 7. 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:

- 8. The panel was encouraged to see that there are some common lectures between the F/T and P/T students. However they would like to see more integration between the two groups of students 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.
- 9. There is a good awareness of the need for foreign languages in the college and also comments were expressed about teaching the French language and aspiration to introduce English to all students. It is considered that currently English is a more global language and there is a need to develop toward the goal of teaching English more globally to all students within the college to improve their chances of being able to communicate with foreign contractor within and outside Lithuania. This was also reflected during the students' meeting where their expressed the need for more foreign language tuition especially English. This was also reflected in the meeting with the Social Partners as they did emphasise the importance of foreign languages especially English and Russian.
- 10. It is encouraging to see that there are plans to invest into improving the IT facilities within the college. It is encouraged to develop more remote access of software to students which will be very beneficial to all students and especially the part time ones.
- 11. The Panel visited the Library facilities during the visit and thought that it was very good with good areas for quite studies and also e-resources. However the lack of foreign language books was noticeable and it is recommended that more specifically specialised book in English should be made available.
- 12. 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.

#### IV. GENERAL ASSESSMENT

The study programme *Building* (65302T107) 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)	4
	Total:	20

<sup>\*1 (</sup>unsatisfactory) - there are essential shortcomings that must be eliminated

4 (very good) - the area is exceptionally good

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<sup>2 (</sup>poor) - meets the established minimum requirements, needs improvement

<sup>3 (</sup>good) - the area develops systematically, has distinctive features