

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Vilniaus Gedimino technikos universiteto

**PROGRAMOS TRANSPORTO IR SPECIALIEJI
STATINIAI (61202T102, 612H21001)**

VERTINIMO IŠVADOS

EVALUATION REPORT

**OF STUDY PROGRAMME BRIDGES AND SPECIAL
STRUCTURES (61202T102, 612H21001)**

at Vilnius Gediminas Technical University

Grupės vadovas:
Team Leader:

Dr. Mark G. Richardson

Grupės nariai:
Team members:

Prof. Roger A. Frank

Prof. Iacint Manoliu

Doc. dr. Arūnas Navickas

Audrius Kolka

Martynas Ubartas

Išvados parengtos anglų kalba
Report language – English

15/11/11

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Transporto ir specialieji statiniai</i>
Valstybinis kodas	61202T102 (naujas kodas – 612H21001)
Studijų sritis	Technologijos mokslai
Studijų kryptis	Statybos inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (4)
Studijų programos apimtis kreditais	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Statybos inžinerijos bakalauras
Studijų programos įregistravimo data	1997 05 19

INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	<i>Bridges and Special Structures</i>
State code	61202T102 (new code – 612H21001)
Study area	Technological Sciences
Study field	Civil Engineering
Kind of the study programme	University studies
Level of studies	First
Study mode (length in years)	Full-time (4)
Scope of the study programme in credits	240
Degree and (or) professional qualifications awarded	Bachelor of Civil Engineering
Date of registration of the study programme	1997 05 19

© Studijų kokybės vertinimo centras
The Centre for Quality Assessment in Higher Education

CONTENTS

I. INTRODUCTION	4
II. PROGRAMME ANALYSIS	5
1. Programme aims and learning outcomes.....	5
1.1. Programme demand, purpose and aims.....	5
1.2. Learning outcomes of the programme.....	6
1.3. Main strengths and weaknesses of programme aims and learning outcomes	6
2. Curriculum design	6
2.1. Programme structure	6
2.2. Programme content.....	7
2.3. Main strengths and weaknesses of Curriculum design	7
3. Staff	7
3.1. Staff composition and turnover	7
3.2. Staff competence	8
3.3 Main strengths and weaknesses of staff	8
4. Facilities and learning resources	8
4.1. Facilities	8
4.2. Learning resources	9
4.3. Main strengths and weaknesses of learning resources	9
5. Study process and student assessment.....	9
5.1. Student admission.....	9
5.2. Study process.....	10
5.3. Student support.....	10
5.4. Student achievement assessment.....	11
5.5. Graduates placement	11
5.6. Main strengths and weaknesses of study process and student assessment.....	11
6. Programme management.....	12
6.1. Programme administration	12
6.2. Internal quality assurance	12
6.3. Main strengths and weaknesses of programme administration.....	12
III. RECOMMENDATIONS	14

I. INTRODUCTION

This report presents the findings of an evaluation of the programme *Transporto ir specialieji statiniai* 61202T102 (new code – 612H21001), referred to in English as the programme *Energy and Transport Structural Engineering* and alternatively *Transport and Special Structures* or *Bridges and Special Structures*. This programme was evaluated against the criteria supplied to the Review Group in the document “Extracts from the Description of the Evaluation Process for Study Programmes and Methodological Guidelines”, with particular reference to Paragraphs 170 to 225.

The report is based on an analysis of the document “Self-Assessment Summary, Study Programme Energy and Transport Structural Engineering (state code – 61202T102), Vilnius, 2010”, 64 pages (excluding annexes) and information gathered by the Review Team during a site visit to Vilnius Gediminas Technical University on 21 September 2011.

The Review Group understands that the programme is in transition to one based on the definitive programme descriptor “Bridges and Special Structures” and this was taken into account in the assessment.

The site visit included:

- discussions with senior faculty administration staff,
- discussions with staff responsible for preparation of Self-Assessment Reports (SAR),
- discussions with teaching staff,
- discussions with students,
- discussions with alumni,
- discussions with employers of recent graduates of the programme,
- inspection of student coursework including final year projects,
- inspection of teaching premises and equipment including auditoria, library, computing facilities and laboratories.

The Review Team found it necessary to get clarification of some issues reported in the SAR. This was in part due to misunderstandings arising through the poor use of written English. The translation of technical terms, such as the name of various subjects, was in some instances inappropriate (e.g. Transport Metal Structures, Construction Process Technology and Technology Construction Processes, Human’s Safety and Environmental Protection). The Review Team was satisfied with the clarifications provided during the site visit and supplementary written clarifications and corrections provided without delay during the Review Team’s period working together in Lithuania.

The international Review Team attempted to conduct its meetings entirely in English. However this was simply impractical as many contributors to the discussions did not understand nor speak English. The extent of the need for translation of both questions and answers was inefficient in the use of the time afforded to the discussions. It also greatly reduced the effectiveness of open dialogue, a significant element of any quality evaluation exercise. Nevertheless the Review Group is satisfied that it gathered sufficient data from written and verbal evidence to form its assessment under each of the six evaluation areas and thereby conclude its evaluation.

The study programme *Transporto ir specialieji statiniai* (“Energy and Transport Structural Engineering” or “Transport and Special Structures” or “Bridges and Special Structures”), with state code 61202T102 and new code 612H21001, was given a positive evaluation, with eight recommendations.

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

Lithuania has more than 4000 bridges and about 70,000 passes, therefore the need for qualified specialists engaged in the maintenance and gradual reconstruction of such works is obvious. Graduates of the programme will also be needed for any new infrastructure concerned with nuclear power stations. Although the need for specialist graduates for the nuclear industry's infrastructure is noted, not all graduates could be expected to find employment in the nuclear industry. Therefore development of more general skills in the field of structural engineering is required. The Review Group noted that the graduates of this programme can work not only on the design and execution of bridges and constructions for energy, but also for buildings. This begs the question of why a specialist separate programme is provided at undergraduate level, rather than as a specialisation of a common civil engineering programme or as a master's degree add-on programme.

It is common for admission to undergraduate engineering programmes to be common to a group of programmes with specialisation later. In 2009, the first year when admission was done separately for each civil engineering specialisation programme in VGTU, and not for the whole group of civil engineering programmes, only 20 candidates were admitted to study the programme on Transport and Special Structures. The figure seems quite low and in contradiction with what was said about the demands of the labour market. It further supports the contention that keeping it as a specialisation of a civil engineering programme, rather than as a separate programme, is more appropriate.

In summary, there is a demand for the attributes of graduates of the programme but consideration should be given to making this programme a specialisation of a general civil engineering programme. For example it could be a specialisation of VGTU's programme Civil Engineering (*Statybos inžinerija*) 61202T107 (new code – 612H21002), or a combination of that undergraduate programme and a masters degree 'deepening' programme that specialises in energy and transport structural engineering.

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

Conformity with the strategic plans of the Vilnius Gediminas Technical University for 2009-2011 and 2010-2012 is clear. Conformity of the programme purpose with state and international directives is not demonstrated. This is probably due to the specialist nature of this programme. The recommendation in Section 1.1.1, that it be a specialisation which originates from a more general civil engineering programme, would further assist later convergence with any international directives deriving from the Bologna Declaration or other directives on regulating the engineering profession at European level.

1.1.3. Relevance of the programme aims

The general statement in the SAR on the main aim of the study programme is valid in fact for any civil engineering programme. This reinforces the issue as to whether or not the specialisation is more suited to a second study cycle programme. Nevertheless it is clear that the programme aims are relevant to Lithuania, irrespective of the overall programme structure for civil engineering in VGTU.

1.2. Learning outcomes of the programme

1.2.1. Comprehensibility and attainability of the learning outcomes

The learning outcomes are appropriate to the programme aims and in certain respects complexity errs on the side of high technical standards, which is valid. The relationship between the detailed aims of the programme and learning outcomes are expressed in respect of knowledge and cognitive/practical competence in SAR Table 3 and Table 4. The timing of the production of the SAR predated the state requirement to rephrase these detailed aims into well-written subject learning outcomes.

1.2.2. Consistency of the learning outcomes

The results expected from the study programme are consistent with the programme structure.

1.2.3. Transformation of the learning outcomes

An internal structure for ensuring the continual updating of programmes in respect of learning outcomes is in place. The role of stakeholders in the updating process is noted, as is the involvement of other faculties of the University in respect of software packages.

1.3. Main strengths and weaknesses of programme aims and learning outcomes

Programme aims are relevant for Lithuania and its comprehensibility and attainability of the learning outcomes are very good.

Graduates of this programme can work not only on the design and execution of bridges and constructions for energy, but also for buildings. This begs the question of why a specialist separate programme is provided at undergraduate level. Consideration should be given to making this programme a specialisation of a general first cycle civil engineering programme.

2. Curriculum design

2.1. Programme structure

2.1.1. Sufficiency of the study volume

The number of contact-hours is sufficient for a 4-year study programme in the area of technological science university studies.

2.1.2. Consistency of the study subjects

The list of subjects given in Table 5.a of the SAR is in line with what could be expected from a good 4-year civil engineering programme. The sequence of these subjects could be improved, especially in respect of the position of the subject 'Foundations of Civil Engineering Structures'. The subject is currently in the very last semester, after all special structures subjects or bridges subjects have been completed, which seems inappropriate. Improvements should be made in the order of the study subjects to ensure a better sequence and a better transfer from basic to special subjects. The following changes are recommended:

- the subject 'Dynamics and Stability of Buildings' should be placed in Semester VI, instead of Semester VII, to immediately follow the subject 'Structural Mechanics';

- the subject ‘Fundamentals of Elasticity Theory’ should be placed in Semester V, instead of Semester VI, to immediately follow the subject ‘Mechanics of Material 2’;
- the subject ‘Soil Mechanics’ should be placed in Semester V, instead of Semester VII;
- the subject ‘Foundations of Civil Engineering Structures’ should be placed in Semester VI, instead of Semester VIII; (presently this subject is offered after the completion of all subjects on design of structures, which is contrary to the international best practice).

2.2. Programme content

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

The information in the SAR confirms compliance with legal acts, referring to the order No 471/29 June 2010 of the Rector and the requirements of ISAK-734.

2.2.2. Comprehensiveness and rationality of programme content

The methodology for programme delivery through contact hours is an appropriate combination of lectures (22% of programme) and laboratories/practicals (18% of programme). The remaining 60% of the programme is independent study. This is appropriate and reflects typical practice in both traditional and modular first study cycle programmes. The sequence of presentation of material could be improved, as discussed in Section 2.1.2. It is also recommended that the number of lecture hours and practical hours of the subject ‘Foundations of Civil Engineering Structures’ be increased by one third, from 24 P + 24 PU to 32 P + 32 PU.

It is further recommended that the subject ‘Special Geotechnical Works’ be included in the list of free choice subjects for both Special Structures and Bridges.

2.3. Main strengths and weaknesses of Curriculum design

The study volume, both in respect to contact-hours and independent work hours, is sufficient.

Improvements should be made in the order of study subjects to ensure a better sequence and a better transfer from basic to special subjects. The number of contact hours for the subject ‘Foundations of Civil Engineering Structures’ is too low and should be increased. A relevant subject such as ‘Special Geotechnic Works’ is missing from the list of free choice subjects for both Bridges and Special Structures.

3. Staff

3.1. Staff composition and turnover

3.1.1. Rationality of the staff composition

The programme is primarily delivered by staff of the Department of Bridges and Special Constructions of the Faculty of Civil Engineering. The SAR states that 10 professors, 66 assistant professors, 29 lecturers and 8 assistants are working in the programme. Although the number of assistants seems low, and raises questions about efficient supervision of laboratory practicals, it is noted that doctoral studies students will take on a future shift in academic duties.

The composition of the teaching staff per age group is satisfactory and succession planning has been alluded to (Paragraph 83 of the SAR).

3.1.2. Turnover of teachers

The low turnover of teachers in the programme is small and is not a matter of concern.

3.2. Staff competence

3.2.1. Compliance of staff experience with the study programme

The staff composition is very good with a staff profile that includes a commendable record of research publications and involvement in funded research projects in the field of study of the programme.

3.2.2. Consistency of teachers' professional development

The qualification improvement regulations of VGTU are commendable. Adequate opportunities are provided to both academic and technical staff. Links with industry in this respect are also noted.

3.3 Main strengths and weaknesses of staff

The staff composition is very good with a staff profile that includes a commendable record of research publications and involvement in funded research projects in the field of study of the programme. The composition of the teaching staff per age group is satisfactory and succession planning has been alluded to. The low turnover of teachers in the programme is small and is not a matter of concern.

4. Facilities and learning resources

4.1. Facilities

4.1.1. Sufficiency and suitability of premises for studies

There are sufficient auditoria and laboratory space for the programme. The lectures are organised in one building complex, except for physical culture training. The lecture theatres are generally in good condition and a rolling refurbishment programme ensures that the proportion of lower quality space is decreasing. Some lecture theatres are equipped with interactive white boards and portable data projection is available where fixed projectors have yet to be installed. Wireless internet access is installed and becoming more widely available in the buildings. Provision for students working on individual tasks is afforded through a number of facilities, including the reading room of the Department of Construction and Management, the library and a computer room. The library hours are good and reading room access hours are generous, especially the Internet Reading Room.

4.1.2. Suitability and sufficiency of equipment for studies

The equipment provided for the programme is good. Some employers wish to see the addition of specific software packages to those already in place. This is typical of the ongoing debate between division of generic education in typical software applications and specific training in particular software packages. At present the software available seems to be appropriate.

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

Practical training is included as an obligatory part of the programme. A tripartite agreement between the student, company and VGTU is prepared and registered in the Department for each work placement. A very significant number of agreements are in place with construction companies, which currently assures that an adequate number of placement opportunities exists.

4.2. Learning resources

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

The resources in place in respect of books, textbooks and periodical publications are good. There is regular investment in books and database subscriptions.

4.2.2. *Suitability and accessibility of learning materials*

The materials provided are suitable and there are an increasing number of databases being accessed by students year-on-year.

4.3. Main strengths and weaknesses of learning resources

The facilities and learning resources are very good, in particular the laboratories and the libraries. There are sufficient auditoria and laboratory space for the programme. Provision for students working on individual tasks is afforded through a number of facilities. Practical training is included as an obligatory part of the programme and a very significant number of agreements for internships are in place with construction companies. The library hours are good. There is regular investment in books and database subscriptions.

5. Study process and student assessment

5.1. Student admission

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

The use of weighted average competitive points with high values for mathematics (0.4) and the inclusion of physics, with a weighting of 0.2, is appropriate. Taken together with the high average value of competitive points, it may be concluded that the students admitted to the programme have the potential to succeed.

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

Many measures are in place to motivate students to enrol in the programme and succeed in their studies. This includes a summer camp for prospective future first year students and nominal scholarships for student achievement during their studies. Interestingly the SAR (Paragraph 156) supports the provision of an opportunity for students to defer their choice of specialisation until they are mature, stating “information about speciality is more understandable to students than schoolchildren.” This further supports the Review Group’s contention that this programme should be a specialisation of a general civil engineering programme rather than a separate programme for direct entry from school.

5.2. Study process

5.2.1. Rationality of the programme schedule

The programme schedule in respect of both student learning and examinations is rational and the workload is well distributed. The dates of assessment are circulated well in advance and provision is made for optimisation of the assessment schedule by the Deputy Dean of Studies, who takes responsibility for the process.

5.2.2. Student academic performance

The drop-out rate is very variable and correlates well to the economic situation. Excessive hours spent on part-time paid employment has an immediate impact on the students' ability to concentrate successfully on coursework submission deadlines and completion of their stage of studies.

5.2.3. Mobility of teachers and students

A supportive environment is in place for teacher mobility, founded on a strategic decision by the University (VGTU Senate Resolution No.16-1, 2006). In the period 2006-2011, 69 co-operation agreements had been signed at the time of preparation of the SAR report. The take-up by staff has been impressive, mainly based on lecturing under the ERASMUS "Teaching Mobility" exchange programme, conferences, international meetings, research projects and internships.

Student mobility at VGTU is good, with a strong track record of students going on ERASMUS exchanges. Applications from students on this programme are strong with typically 5 students a year being successful in the competition for outgoing ERASMUS exchanges. The Faculty of Civil Engineering is also the second most popular host for incoming ERASMUS students at VGTU. The Faculty typically hosts over 35 students each year, amounting to about 15 % of all incoming exchange students to VGTU.

5.3. Student support

5.3.1. Usefulness of academic support

The Review Group was satisfied that academic support to the programme is satisfactory. Students are supported through individual study plans. In addition to regular contact with lecturers on teaching and learning issues, increasingly by e-mail, students are afforded specific advice on careers.

5.3.2. Efficiency of social support

The Review Group did not find any particular resource specifically devoted to student welfare, such as a Faculty Student Advisor or Student Counsellor.

Sport and cultural activities are well catered for but student involvement in cultural societies and sports clubs is low. This mirrors a common trend in European universities whereby students of engineering perceive their contact hours to be much higher than those of students of the humanities. This mitigates against extracurricular activities which require significant commitment to clubs and societies. Onetime grants are given for active cultural, sports and other public activities for the benefit of the university

The students spoke well of support provided by VGTU Students' Representation, through the class representative structure.

There was general agreement among current students and recent graduates that student accommodation facilities could be improved to enhance study conditions.

5.4. Student achievement assessment

5.4.1. Suitability of assessment criteria and their publicity

The relationship between score, description of knowledge and skills, and the percentage of goals achieved (Table 18 of the SAR) are clearly stated. The formulae used for calculating scores in the case of accumulative evaluations ensure that the students spread their workload evenly and are aware of the marks distribution. All of this information is made known to the students in advance, through announcements at lectures and through the University's website.

5.4.2. Feedback efficiency

Feedback is good. Students receive their results in a timely manner and may discuss the results with the lecturer. In addition the feedback is considered at several levels in the University (Departmental, Dean's Office and Rector's Office).

5.4.3. Efficiency of final thesis assessment

The procedures for the final thesis assessment are thorough. The topics and supervisors require approval of the Dean. A five-person 'Committee for Qualification Degrees' (CQD) is assembled for considering the defence of final theses. The CQD includes specialists from practice, one of whom chairs the committee. Not more than two-thirds of the membership of the CQD may be drawn from the faculty which hosts the programme.

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

Not applicable in this case. This innovation has not been introduced to the programme yet.

5.5. Graduates placement

5.5.1. Expediency of graduate placement

Approximately 80% of graduates in 2008 were successfully placed in employment with construction companies. The number of graduates in 2009 successfully working in construction companies decreased to 60%. This was a direct impact of the market conditions, which are traditionally cyclical in construction and difficult to predict.

5.6. Main strengths and weaknesses of study process and student assessment

The rationality of the programme schedule, the student academic performance and the mobility of teachers and students are excellent, demonstrating the high strength of the study process. Student achievement assessment is good, with a special commendation on the use of a five-person Committee for Qualifications Degrees for considering the defence of the final theses. The Committee includes two persons from industry.

The Review Group did not find any particular University resource specifically devoted to student welfare, such as a Faculty Student Advisor or Student Counsellor. Student accommodation facilities could be improved to enhance study conditions.

6. Programme management

6.1. Programme administration

6.1.1. Efficiency of the programme management activities

The programme is well-managed and is backed up by a five-level documentation system, in which a lower-level hierarchical document (for example, description of a module) must comply with the higher-level documents (for example, university-level procedures). The overview of Senate, Rector's Office, Faculty Council (including student representation) and Dean assures a quality system is in place.

On a more general note, the Review Group wish to comment on the overall efficiency of programme management structures for civil engineering and construction undergraduate programmes at VGTU. The Review Group was involved in the evaluation of three separate engineering undergraduate programmes at VGTU related to civil engineering and construction. While recognising the need for graduates in all the resultant specialisations, the Review Group questions whether or not it is necessary to have so many separate programme structures. Consideration should be given to making this programme a specialisation of a general civil engineering programme. For example, all civil engineering undergraduate programmes could be grouped under one programme, such as VGTU's programme Civil Engineering (*Statybos inžinerija*) 61202T107 (new code – 612H21002), with an increase in the number of specialisations in that programme. This may lead to more efficient use of programme management resources.

6.2. Internal quality assurance

6.2.1. Suitability of the programme quality evaluation

The programme quality evaluation system ensures ongoing review of quality together with significant reviews at least every 5 years. External assessment or an order of the Rector may result in more frequent major reviews.

6.2.2. Efficiency of the programme quality improvement

The programme quality improvement is good. Examples were provided of effective follow-up action resulting from programme quality evaluation.

6.2.3. Efficiency of stakeholders participation.

Stakeholder participation is satisfactory. Students are involved in the process, including through representation on a permanent faculty member study committee. There are links with employers and alumni. Meetings with social partners are required at least once per year.

6.3. Main strengths and weaknesses of programme administration

The good management of the programme is backed up by a five-level documentation system and by a quality evaluation system. There is, however, room for a more efficient use of programme management resources.

Consideration should be given to grouping several undergraduate programmes, including “Bridges and Special Structures” under one programme such as VGTU’s programme Statybos inžinerija (Civil Engineering), 61202T107 (new code 612H21002).

III. RECOMMENDATIONS

3.1.

Consideration should be given to making this programme a specialisation of a general civil engineering programme, or a masters degree 'deepening' programme that specialises in energy and transport structural engineering where prior learning is required from an appropriate first cycle civil engineering programme.

3.2.

Improvements should be made in the order of the study subjects to ensure a better sequence and a better transfer from basic to special subjects. The following changes are recommended:

- the subject 'Dynamics and Stability of Buildings' should be placed in Semester VI, instead of Semester VII, to immediately follow the subject 'Structural Mechanics';
- the subject 'Fundamentals of Elasticity Theory' should be placed in Semester V, instead of Semester VI, to immediately follow the subject 'Mechanics of Material 2';
- the subject 'Soil Mechanics' should be placed in Semester V, instead of Semester VII;
- the subject 'Foundations of Civil Engineering Structures' should be placed in Semester VI, instead of Semester VIII; (presently this subject is offered after the completion of all subjects on design of structures, which is contrary to the international best practice).

3.3.

It is recommended that the number of contact hours of the subject 'Foundations of Civil Engineering Structures' should be increased from 24 P + 24 PU to 32 P + 32 PU.

3.4.

It is recommended that the subject 'Special Geotechnical Works' be included in the list of free choice subjects for both Special Structures and Bridges.

3.5.

Notwithstanding current good standards of teaching, international best practice indicates that more formal collegial evaluation of teaching, instead of informal evaluation of teachers work by department staff, is recommended. This could be implemented by using certain evaluation criterions.

3.6.

Student accommodation facilities should be improved to enhance study conditions.

3.7.

The University should consider providing a professional resource specifically devoted to student welfare, such as a Faculty Student Advisor or Student Counsellor

3.8.

The Review Group recommends that VGTU examine the more efficient use of programme management resources. The Review Group questions whether or not it is necessary to have so many separate engineering programmes. Consideration should be given to grouping several undergraduate programmes, including this one, under one programme, such as VGTU's programme Civil Engineering (*Statybos inžinerija*) 61202T107 (new code – 612H21002), with an increase in the number of specialisations in that programme.

The study programme *Bridges and Special structures* (state code – 61202T102, new code – 612H21001) is given **positive** evaluation.

Study programme assessment in points by fields of assessment.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Staff	4
4.	Material resources	4
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	3
	Total:	20

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

Grupēs vadovas:
Team Leader:

Dr. Mark G. Richardson

Grupēs nariai:
Team members:

Prof. Roger A. Frank

Prof. Iacint Manoliu

Doc. dr. Arūnas Navickas

Audrius Kolka

Martynas Ubartas

ASSESSMENT FORM

Criterion	Assessment [*]				
	1	2	3	4	5
1. Programme aims and learning outcomes					
<i>1.1. Programme demand, purpose and aims</i>					
1.1.1. Uniqueness and rationale of the need for the programme				X	
1.1.2. Conformity of the programme purpose with the institutional, state and international directives				X	
1.1.3. Relevance of the programme aims				X	
<i>1.2. Learning outcomes of the programme</i>					
1.2.1. The comprehensibility and attainability of the learning outcomes				X	
1.2.2. Consistency of the intended learning outcomes				X	
1.2.3. Transformation of the learning outcomes				X	
2. Curriculum design					
<i>2.1. Programme structure</i>					
2.1.1. Sufficiency of the study volume				X	
2.1.2. Consistency of the study subjects			X		
<i>2.2. Programme content</i>					
2.2.1. Compliance of the contents of the studies with legal acts					X
2.2.2. Comprehensiveness and rationality of the programme content			X		
3. Staff					
<i>3.1. Staff composition and turnover</i>					
3.1.1. Rationality of the staff composition					X
3.1.2. Turnover of teachers					X
<i>3.2. Staff competence</i>					
3.2.1. Compliance of staff experience with the study programme					X
3.2.2. Consistency of teachers' professional				X	

development					
4. Facilities and learning resources					
<i>4.1. Facilities</i>					
4.1.1. Sufficiency and suitability of premises for studies					X
4.1.2. Suitability and sufficiency of equipment for studies					X
4.1.3. Suitability and accessibility of the resources for practical training					X
<i>4.2. Learning resources</i>					
4.2.1. Suitability and accessibility of books, textbooks and periodic publications					X
4.2.2. Suitability and accessibility of learning materials					X
5. Study process and student assessment					
<i>5.1. Student admission</i>					
5.1.1. Rationality of requirements for admission to the studies					X
5.1.2. Efficiency of enhancing the motivation of applicants and new students				X	
<i>5.2. Study process</i>					
5.2.1. Rationality of the programme schedule					X
5.2.2. Student academic performance					X
5.2.3. Mobility of teachers and students					X
<i>5.3. Student support</i>					
5.3.1. Usefulness of academic support					X
5.3.2. Efficiency of social support			X		
<i>5.4. Achievement assessment</i>					
5.4.1. Suitability of assessment criteria and their publicity				X	
5.4.2. Feedback efficiency				X	
5.4.3. Efficiency of graduation papers assessment				X	

5.4.4. Functionality of the system for assessment and recognition of achievements acquired in a non-formal and self-study way.	Not applicable				
<i>5.5 Graduate placement</i>					
5.5.1 Expediency of graduate placement				X	
6. Programme management					
<i>6.1. Programme administration</i>					
6.1.1. Efficiency of the programme management activities					X
<i>6.2. Internal quality assurance</i>					
6.2.1. Suitability of the programme quality assessment				X	
6.2.2. Efficiency of the programme quality improvement					X
6.2.3. Efficiency of stakeholders' participation					X

* – **Values of scores:**

1 – based on this criterion the programme is unsatisfactory, as there are essential shortcomings that must be immediately eliminated;

2 – based on this criterion the programme is poor, as there are a lot of shortcomings which are not essential;

3 – based on this criterion the programme is satisfactory; the programme meets the established minimum requirements and has one or two shortcomings which are not essential;

4 - based on this criterion the programme is good; the programme meets the requirements higher than those established by legal acts;

5 – based on this criterion the programme is excellent; the quality of programme implementation is of an exceptionally high level.