STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

ALEKSANDRO STULGINSKIO UNIVERSITETO AGROENERGETIKOS INŽINERIJOS PROGRAMOS (612E30003) VERTINIMO IŠVADOS

EVALUATION REPORT OF ENGINEERING OF AGROENERGETICS (612E30003) STUDY PROGRAMME AT ALEKSANDRAS STULGINSKIS UNIVERSITY

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Išvados parengtos anglų kalba
Report language - English

Vilnius
2012

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Agroenergetikos inžinerija
Valstybinis kodas	612E30003
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Energijos inžinerija
Studijų programos rūšis	Universitetinė
Studijų pakopa	pirmoji
Studijų forma (trukmė metais)	Nuolatinė (4), neakivaizdinė (6) (5)
Studijų programos apimtis kreditais[1]	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Energijos inžinerijos bakalauras
Studijų programos įregistravimo data	1997 05 16

[1] – vienas kreditas laikomas lygiu 40 studento darbo valandų

INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	Engineering of Agroenergetics
State code	612E30003
Study area	Technological Sciences
Study field	Energy engineering
Kind of the study programme	University studies
Level of studies	first
Study mode (length in years)	Full-time (4), part-time (6) (5)
Scope of the study programme in national credits	240
Degree and (or) professional qualifications awarded	Bachelor of Energy Engineering
Date of registration of the study programme	May 16, 1997

CONTENTS

I. INTRODUCTION

The assessment is based on the analysis of documents prepared by the self-assessment group of experts of the ALEKSANDRAS STULGINSKIS UNIVERSITY headed by Prof. Navickas of October 2011 and the information obtained from the representatives of the assessed institution during the visit of the assessment team at the university on 2012-03-27.

The basis for the assessment were requirements set forth in:

1. METHODOLOGY FOR EVALUATION OF HIGHER EDUCATION STUDY PROGRAMS (Approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education)
2. EXTRACTS FROM THE DESCRIPTION OF THE EVALUATION PROCESS FOR STUDY PROGRAMMES AND METHODOLOGICAL GUIDELINES
3. Financing system of higher education Institutions (HEI) in Lithuania
4. HIGHER EDUCATION SYSTEM IN LITHUANIA – SHORT INTRODUCTION
5. A Framework for Qualifications of The European Higher Education Area (QF-EHEA), http://www.bologna-bergen2005.no/Docs/00-Main_doc/050218_QF_EHEA.pdf
6. A Tuning Guide to Formulating Degree Programme Profiles Including Programme Competences and Programme Learning Outcomes, http://core-project.eu/documents/Tuning%20G%20Formulating%20Degree%20PR4.pdf

Schedule for the visit:

The members of the peer team have acquainted themselves with and provisionally assessed the documentation and annexes provided by the Centre. The following schedule for the visit has been prepared and executed:

Tuesday, 27 March	
10.00 – 10.45	Meeting faculty administration
10.45 – 11.45	Meeting self-evaluation teams
11.45 – 11.55	*Short break*
11.55 – 12.55	Meeting teaching staff
12.55 - 13.55	*Lunch*
13.55 – 14.45	Visiting auditoriums, libraries, laboratories, other facilities
14.45 – 15.30	Review of students' course and final papers, examination tasks, other material requested by expert team
15.30 – 16.10	Meeting students
16.10 – 16.45	Meeting graduates
16.45 – 17.20	Meeting employers
17.20 – 18.00	Team meeting, preparation of presentation of preliminary findings
18.00 – 18.20	Presentation of preliminary findings to University community

II. PROGRAMME ANALYSIS

Aleksandras Stulginskis University (ASU) is an institution of higher education devoted to education and research in the field of agriculture. The university has clearly defined its mission in the Lithuanian society. Besides agriculture, mission objectives are rural development and the

sustainable use of natural resources. ASU has designed both an undergraduate and a graduate degree programme *Engineering of Agroenergetics* that emphasises the sustainable use of natural resources for power generation.
This assessment report covers the undergraduate programme.

1. Programme aims and learning outcomes

The framework for qualification for the "EHEA" (European Higher Education Area) defines learning outcomes as statements of what a learner is expected to know, understand and/or be able to do at the end of the period of learning.

The university did define the aims of the study programmes. The university did not formulate the learning outcomes of the programme explicitly. However, the university somehow mixed aims and outcomes in its self-evaluation report. The peer team could conclude that learning outcomes compatible with the QF-EHEA are implicitly present, although they are not explicitly stated. The European Commission in 2010 has released recommendations for writing programme's learning outcomes (A Tuning Guide to Formulating Degree Programme Profiles Including Programme Competences and Programme Learning Outcomes, http://core-project.eu/documents/Tuning%20G%20Formulating%20Degree%20PR4.pdf).

The peer team recommend to state explicitly and separately

(1) the aims of the programme,
(2) the objectives of the programme and
(3) the learning outcomes of the programme.

The website of the university allows to access the before mentioned aims in Lithuanian. A shorter version of the aims is available in English. The assessment team recommends presenting the same and full information in both languages.

From the discussion with the graduates of the programme and the employers of the graduates, the members of the peer team conclude that the aims and the learning outcomes of the programme meet the needs of the Lithuanian society and industry. The peer team moreover attests the compliancy of the aims and the learning outcomes to the needs of the European labour market.

The undergraduate programme prepares the graduates for continuing their studies on the master's level and prepares them for autonomous life-long learning. Thus, it meets the requirements for a degree programme on level 6 of the QF-EHEA.

Two different English names for the degree programme have been found. One name is "Engineering of Agroenergetics" (in self-assessment report), while the other name is "Agricultural Power Engineering" (in AIKOS database). Using two different English names for one degree programme is misleading and not acceptable. The peer team recommends using only one English denomination of the programme.

The Lithuanian name of the programme corresponds to the content and the outcomes (which have to be explicitly defined, see above) of the programme.

Strength of the programme is that it meets the needs of the society and the Lithuanian and European labour market. It prepares engineers to work in the field of renewable energy, which is likely to become a prosperous part of industry and agriculture. The distributed generation of energy as practised in the agricultural sector seems to become an important contribution to the safe and reliable generation, distribution, and effective use of energy.

A weakness of the programme is the improper and incomplete definition of the programme aims, objectives and learning outcomes.

2. Curriculum design

The framework for qualification of European higher education requires degree programmes to be subdivided into three levels: the bachelor's level (level 6, level 7 and level 8),

the master's level and the doctorate level. The peer team finds one programme on level 6 (bachelor) and one programme on level 7 (master). The programme covered here is on the bachelor's level. The standard period of instruction for this programme is four years. The workload amounts to 240 ECTS credits. This is compliant with the Bologna declaration and Lithuanian legal requirements.

The university has subdivided the degree programme into educational components of different size. The size of each educational component is 3 to 8 ECTS credits. The educational components appear to be well designed. The fundamentals of mathematics, natural sciences, and engineering are covered to an extent that is appropriate for an undergraduate education in engineering. The content of each educational component corresponds to the intended learning outcomes of that component. The number of ECTS credits per educational component has been carefully assigned. The size of an educational component varies according to the workload for the average student. The content of an educational component is in each case thematically defined. The acquisition of the knowledge according to the intended learning outcomes of each educational component is assessed by a written exam. Taking student exchange with foreign countries into account, both size and content of all educational components seem to be appropriate. The educational components are neither too big to prevent transfer of credits and marks for mobile students, nor are they too small, which would lead to inappropriate high number of exams.

The number of educational components and thus the number of exams does not exceed the legal requirement of not more than seven per semester.

General and liberal education amounts to 18 ECTS credits, and, thus, complies with the requirement minimum of 15 ECTS credits.

Subject specific educational components comprise the mandatory courses in engineering and natural sciences (164 ECTS credits), electives (10 ECTS credits), practical training (12 ECTS credits[1]) and the bachelor's thesis (12 ECTS credits). Of these not more than 60 ECTS credits pertain to specialised subjects.

The industrial placement comprises of 12 ECTS credits. Additional practical training is found in laboratory courses within the university, e.g. "Electrical equipment and safety" or basics of "Agronomy and ecology". This obviously meets the legal requirements of not less than 15 ECTS credits for "practical placement".

Economics, Law, and Project Management courses encompass 12 ECTS credits in total.

The bachelor's thesis earns 12 ECTS credits, which complies with the legally required minimum of not less than 12 ECTS credits.

The peer team found that the educational components of the programme cover most of the learning outcomes and contents that would be needed to educate a bachelor in the field of Agricultural Power Engineering. However, engineers in this field often have to model processes and have to use modern simulation tools, e.g. Matlab-Simulink, Computational Fluid Dynamics (CFD) programmes and finite-element software. All of these require a deep understanding of numerical mathematics and numerical methods. The peer team stresses that a profound knowledge of numerical mathematics and numerical methods is essential to engineering practise in this field. The university should consider to provide for those elements in appropriate educational components and to incorporate such material into the undergraduate degree programme. The introduction of those elements may be accomplished by reducing the workload on more traditional subjects.

The methods of instruction in the undergraduate programme are rather traditional. The peer team does not find evidence that activating forms of learning and teaching are practiced. The training of the transferable skills is missing at all throughout undergraduate education. The

[1] 16 ECTS credits seem to be a miscalculation in Table 2.4. The figures in the internet version (15 ECTS credits and 22 ECTS credits) are obviously inconsistent, as also the number of internships.

only courses addressing teamwork are Lithuanian and foreign language courses. However, teamwork is indispensable for modern engineers in the industry. The present programme does not prepare the students sufficiently to cooperate in industrial teams. A way of engaging students to participate actively in the process of learning is to introduce project-based learning (PBL). Here, the students get ownership over the process of learning; they themselves determine the pace and the subject of learning. Moreover, the students are able to acquire general skills like the ability to cooperate in teams, to communicate and to present. The auditors recommend starting with problem-based learning in one or two subjects at first. Because the teaching of PBL courses requires special knowledge in didactic methods, the auditors recommend sending professors and staff to other (possibly foreign) universities where PBL is applied in order to learn about the best practice in this field.

With the exception of numerical mathematics and numerical methods, the programme seems to cover the required subjects and thus, is highly adequate to reach the learning outcomes of the programme.

Again, numerical mathematics and numerical methods seems to be the only deficit of the programme. Otherwise, the level of instruction in mathematics, natural sciences, engineering fundamental and engineering applications do meet the requirements of a modern, internationally competitive engineering education. The content of the programme reflects the latest achievements in agricultural power engineering.

Strength of the programme is the profound education of the students in the mathematics, natural sciences and engineering fundamentals. The programme offers individual specialisation and opens space for individual development.

A weakness is a more traditional type of instruction. The professors are not aware or do not practise modern forms of instruction like problem-based learning or other activating forms of learning and teaching.

3. Staff

The legal requirement that more than one-half of the subjects of the study field is taught by scientists is fulfilled.

The teaching staff in this programme consists of 22 professors, associated professors and academic lecturers holding doctoral degrees. In addition, there are nine academic teachers without doctoral qualification. The qualification of the teaching staff complies with the legal requirements and is adequate to ensure the proper conduct of the programme.

The number of first year students was 38 in 2008/9. The number dropped to 19 in 2009/10 and it was a low as 10 in 2010/11 (page 27 of the self-assessment report). According to these figures, on the average 89 students are simultaneously enrolled in the four-year programme. Thus, the ratio of students to academic teachers is 2.9 for the whole degree programme. The peer team have gained the impression that the capacity of the university for student intake into this degree programme is not yet at its limit.

The enrolment figures reported on page 19 in the self-assessment report are not compatible with the figures reported on page 2728. Page 19 provides information of 317 full time and 513 part time students in the period from 2008 to 2010. However, in page 28 an enrolment of 38 students in study year 2008/09, 19 – in 2009/20 and 10 in 2010/11 is reported, which far below above mentioned number.

The age distribution of the academic teachers of the programme requires a rapid replacement of professors within the forthcoming years. This is a chance to attract young academics with new ideas for teaching and learning to the university.

Upon questioning the teaching staff on possibilities of professional advancement of their didactic skills, the peer team won the impression that there exists some potential for improvement. For instance, professors should have the opportunity to spend a sabbatical at a

university abroad in order to exchange ideas on modern didactic methods as well as on research. The didactic abilities of the academic teachers need constant training and improvement. If a didactic centre was available either at the university or centrally in Lithuania, the academic teachers should be sent there regularly for refreshing their didactic skills and to learn about new didactic principles. A valuable source of information that obviously is not yet used by the university and their academic teachers are the annual conferences of organizations dealing with engineering education, e.g. SEFI (European Society for Engineering Education) and ASEE (American Society for Engineering Education).

Some academic teachers are active in academic research. Active professors have 1 to 3 doctoral candidates to supervise. From the list in Annex 2 the peer team concluded that the various subjects of the degree programme are taught by specialists in their respective fields, i.e. mathematics is taught by mathematicians, whose research field is mathematics. Corresponding findings pertain to other courses.

Strength of the programme is the high competence of the academic staff and their dedication to scientific research.

Weakness of the programme is the lack of new didactic methods and opportunities for the self-improvement. The instrument of a sabbatical leave seems not to be widely known.

4. Facilities and learning resources

The university campus is a wide area of land with scattered buildings and ample meadows between. Some of the buildings have recently been renovated and are in good shape. Others are old and need renovation. A new laboratory building is under construction on the campus. Sanitary installation in the buildings visited by the peer team was old, mostly clean, and functioning. A sufficient number of lecture halls and student classrooms is available. They are equipped with the necessary furniture and basic didactic material. Projectors and computers for multimedia-based instruction are available. Very modern didactic equipment like digital whiteboards or smartboards is yet missing.

The university uses the public domain software bundle Moodle as a modern eLearning tool. All students reported upon questioning to have access to the university servers from their private computers.

While in the self-assessment report the campus wide availability of wireless internet access and even EDUROAM access was explicitly stated, the peer team was unable to find a wireless net in one of the central buildings. In the university library the EDUROAM net was available but could not be accessed by members of the assessment team due to restrictions imposed by the local security officers for visitors from other universities. The peer team points out that the idea behind EDUROAM is to grant visiting scholars and administrators worldwide access to the internet without restrictions.

The laboratories visited by the peer team were in general in good condition and adequately equipped. No violations of safety requirements were observed during the visits. Some of the equipment is rather old and outdated; it will have to be replaced by modern equipment in the near future. However, some of the equipment, e.g. in the biotechnology labs, is very new and meets modern standards. The experiments are well designed and build onto each other, thus, enabling the students to learn about consecutive steps of the biomass production chain. Some of the equipment, e.g. a biogas reactor, has been designed and constructed by the university itself. The auditors welcome such best practice emphatically and encourage professors and staff to continue with these exemplary activities. The peer team gained the impression that the university uses its resources efficiently. However, the resources are limited and need to be boosted in order for the university to become more competitive on a European level.

The peer team visited the university library. The library is equipped with a limited number of computer work places with internet access. The university has bought online access to some of the journals, books and textbooks of leading publishers via the Lithuanian Research

Library Consortium. However, some of the often required literature is not available online. Some of the main textbooks and reference books, defined as key-books for the courses, are not available online. An example is the „VDI heat atlas“, which is considered to be a standard reference book in the field of heat transfer, a core subject of the degree programme. Only the headlines of the individual chapters of the VDI heat atlas can be accessed, the content of the chapters cannot be accessed online. Conventional access to literature, i.e. walking to the library, lending printed books or journals, or ordering missing literature from other university libraries, is possible and often practised.

Strength is the momentum of the modernisation of buildings and laboratory equipment.

A weakness is a lack of sufficient access to the international literature (especially e-books). Part of the laboratory equipment needs to be refurbished.

5. Study process and student assessment

Students are admitted according to national regulations based on high school graduation results. Access to state financed places is competitive and has to meet minimum standards. Those not admitted to state funded places get access to the programme if they pay tuition on their own. Results for the last few years are given in the self-assessment report. The peer team points out that while the admission requirements conform with current regulations in Lithuania, nevertheless the lack of stricter criteria than just the completion of secondary education might influence the average student niveau in a negative way. Open days, national higher educational exhibitions, practical demonstrations and other means help to enhance the motivation of prospective students. New students take part in special fresher camps. The university maintains an internet page giving all the necessary information concerning the programmes.

The academic year is organized in two semesters. Timetables are scheduled rationally. The study classes are well distributed during a week and a semester. The sequence of the different courses follows a consistent and well elaborated scheme. The examination sessions are carefully planned and fit well into the study programme. There is a reasonable failure rate at some of the courses (around 25%), which might correspond to the relatively liberal admission policy. It seems that working and earning for living simultaneously while studying affects the performance in a negative way. The drop-out rate is low. Due to the limited research activities of the teaching staff there is a considerable lack of possibilities for students to actively participate in undergraduate research.

Mobility of staff is documented. However, the figures of both outgoing and incoming staff tend to decrease. There are several co-operations with universities and technical colleges outside Lithuania. Some of the teachers make use of the exchange programme but the number of actual exchanges is rather small. The mobility of outgoing students is stable on a low level. However, there seems to be a too small number of students arriving, in some years the figure was actually zero. The main reason against mobility given by students is their necessity to work for covering the costs of living. The lacking mobility of the students decreases their chances to be successful within the European labour market. Individual support is provided for disabled and foreign students, if needed. The peer team got the impression that both the offer of counselling by the university and the demand of counselling by the students should be intensified. Even students did not articulate clearly what needs they have and what formal arrangement for such counselling is available. However, no complaints were formulated during the visit. ASU pays much attention to familiarize the students with career possibilities. The students have close contacts to the teaching staff with respect to study issues and career possibilities. Personal interests of the students are taken into consideration as far as the free and elective studies are concerned.

The assessment structure of each study subject is announced in advance. The assessment criteria correlate with the intended learning outcomes. They are made public in Lithuanian but

not in English. There is no ambiguity on the side of the students with respect to the required criteria. The grading system is well defined and rational.

After the examination the students have access to the corrected exam papers. The individual student can discuss his or her exam with the teacher and improve his or her marks with an additional oral part. This is a generally accepted and efficient method that can be applied when the number of students is not too high.

The final thesis assessment corresponds to university regulations. The level of the theses is satisfactory compared to international standards. The assessment sheets of exemplary theses examined onsite demonstrate meticulous care in the assessment process. .

Most of the graduates are able to find a job corresponding to their qualifications. Some get employment with companies less in the focus of their respective specialisation, while a few are jobless.

Admission to the undergraduate programme requires the successfully completed secondary school education with a weighted mark point average (SKB value) above a minimum SKB value. This minimum SKB value is set each year by the state and not by the university, taking into account the number of study vouchers for the particular study area and the number of applicants to this study area. On one hand, the university is not fully autonomous in selecting their students since the students' selection and appointment system is applied to all universities. However, the university can apply the minimum requirement on weighted mark point average (e.g., the only Vilnius University and Vytautas Magnus University has appointed the minimum requirements of 8 points). Nevertheless, the admission to undergraduate studies appears to be equal and fair for all applicants. One fourth of the students receive a scholarship from the state (the value of 110 LTL/month). 70 % of students' tuition fees are covered by the state. The remaining students have to pay full tuition of 5200 LTL per year. Tuition for part time students is 3428 LTL per year.

The study programme is divided into 8 semesters. The student workload is 30 ECTS credits per semester. The sequence of the educational components of the study programme is logically arranged. From semester 1 to semester 7 the students have 6 to 7 written exams; this number of exams is perfectly acceptable and internationally comparable. The exams should be designed in such a form that they assess the intended learning outcomes of the educational component. It is important that the learning outcomes are properly written and address the whole spectrum of levels of the learning process, not just knowledge, understanding and application but also analytical abilities, synthesis and evaluation. If these principles are applied, students can complete their studies within the standard period of 8 semesters.

Student mobility in this study programme can be improved. In the past, only one student was internationally mobile. The programme offers mobility windows in the third and the fourth year of instruction. In both years standard courses like thermodynamics, power electronics, automatic control etc. are taught. Such educational components are taught at engineering faculties throughout the world on a comparable level. Thus, credits and marks can be easily transferred between the institutions. For mobile students Erasmus stipends of about 450 EUR per month are available, thus, covering a huge part of living costs abroad. Student exchange can be individual ("free movers") or institutionalised between partner universities. The latter requires collaborating with other universities. In order that these partnerships are sustainable, it is important that equal partners form partnerships. The peer team recommends to the university to form such institutional partnerships and to send both students and academic teachers abroad and to invite both students and professors from abroad.

The learning outcomes of all educational components are publicly available in Lithuanian but not to the same extent in English. The students ascertained during their conversation with the peer team that their teachers inform them at the beginning of each educational unit on the intended learning outcomes of the course.

The graduates of the degree programme and the employers of the graduates spoke very highly about the qualifications gained during the undergraduate course.

Strength of the programme is a clear and well-designed curriculum. Students are able to complete the programme without delay and within the standard period of studies. The dropout rate is very low, compared to similar degree programmes in other countries. Students are able to complete the programme without delay. They can discuss the exams with the teacher and improve their marks with an additional oral part.

Weaknesses of the degree programme are the low number of students within the programme and the low international mobility of students and staff. The mobility of outgoing students is low to satisfactory, but there seems to be a too small number of students arriving, in some years actually zero.

6. Programme management

The peer team discussed with the dean and his staff as well as with the academic teachers the implementation procedures of the programme. The students not regularly assess the educational components at the end of a semester. The dean's office collects and evaluates the results. The peer team observed that in most, if not in all cases a summative evaluation took place. Summative evaluations are nice to have but hardly deliver more than "comfort sheets". In particular, they do not easily lead to changes in the educational process. Contrary to summative evaluations are formative evaluations. Formative evaluations require more effort and often need the participation of third parties, e.g. from the didactic centre of the university or another institution. If the university or the faculty is inexperienced in formative assessments, external counsel from institutions with the required experience might be necessary.

Stakeholders in the degree programme are the students to be educated, their parents and the society who have to provide tuition fees, the academic teachers who deliver the educational components and the employers from the industry or research institutes who receive the graduates. When asking the stakeholders for their advice it should be kept in mind that stakeholders hardly argue altruistically and that their advice might be biased. Eventually, the university and the faculty are the only ones to take responsibility for the degree programme and its curriculum.

III. RECOMMENDATIONS

3.1. The academic staff should carefully rewrite the aims, objectives, and learning outcomes of the degree programme and its educational components.

3.2. The faculty should consider incorporating elements of problem based learning into the degree programme. In order to do so, the peer team recommends external counselling.

3.3. The university and the faculty should look for equal partners for student and teacher exchange and increase the incoming and outgoing mobility of both students and academic staff.

3.4. The university and the faculty should reconsider the evaluation of the educational components. The peer team recommends the transition from the traditional summative evaluation to a modern formative evaluation.

IV. SUMMARY

The bachelor degree programme “Engineering of Agroenergetics” meets the needs of the society and the Lithuanian and European labour market. It prepares engineers to work in the field of renewable energy, which in long-term perspective is likely to become one of the key elements in agriculture and energy fields. The programme has the profound education in the mathematics, natural sciences and engineering fundamentals with individual specialisations.

The programme's aims, objectives and learning outcomes should be revisited and more completely defied. One and only one English name for the programme should be used. In the learning process modern forms of instruction should be introduced, e.g. problem-based learning.

High competence of the academic staff provides for the strength to the programme. However, lack of new didactic methods and opportunities for the self-improvement are the obstacles to improve the programme. The age distribution of the academic teachers of the programme requires a rapid replacement of professors within the forthcoming years. This is a chance to attract young academics with new ideas for teaching and learning to the university.

The modernisation of buildings and laboratory equipment is visible; however, university and faculty should put all attention not to lose the momentum.

A clear and well-designed curriculum of the programme enables students to complete the programme without delay and within the standard period of studies. The dropout rate is low, which seems to show high motivation of students. However, the low number of students within the programme may lead to non-sustainability of the programme. The incoming and outgoing mobility of both students and academic staff is too low and needs to be increased.

The results of the evaluation of the courses should be more thoroughly analysed and discussed with the students. Students are one of the key stakeholders, thus, open communication to them is a very important element.

IV. GENERAL ASSESSMENT

The study programme Engineering of Agroenergetics (state code – 612E30003) 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	**3**
4.	Material resources	**2**
5.	Study process and assessment (student admission, study process student support, achievement assessment)	**3**
6.	Programme management (programme administration, internal quality assurance)	**2**
	Total:	**16**

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

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

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

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

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Grupės nariai: Team members:	Prof. Dr. Zbigniew Hanzelka Dr. Rolandas Urbonas Šarūnas Venslavas