

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

ALEKSANDRO STULGINSKIO UNIVERSITETO ŽEMĖTVARKOS STUDIJŲ PROGRAMOS (612H91001) VERTINIMO IŠVADOS

EVALUATION REPORT OF LAND USE PLANNING (612H91001) STUDY PROGRAMME at ALEKSANDRAS STULGINSKIS UNIVERSITY

Grupės vadovas: Team leader: Prof. dr. Bernd Teichert

Grupės nariai:
Team members:
Prof. dr. Mercedes Farjas

Prof. Janusz Uriasz Dr. Saulius Urbanas Gražvydas Jakaitis

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DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Land Use Planning
Valstybinis kodas	612H91001
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (4 m.)
Studijų programos apimtis kreditais	240 ECTS
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Žemėtvarkos bakalauras
Studijų programos įregistravimo data	1993

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	Land Use Planning
State code	612H91001
Study area	Technological Sciences
Study field	Engineering
Kind of the study programme	University Studies
Study cycle	First
Study mode (length in years)	Full-time (4 years) Part-time (6 years, admission before 2009 –5 years)
Volume of the study programme in credits	240 ECTS
Degree and (or) professional qualifications awarded	Bachelor of Land Use Planning or Bachelor of Landscape Management if enrolled before 2010
Date of registration of the study programme	1993

Studijų kokybės vertinimo centras

The Centre for Quality Assessment in Higher Education

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I. INTRODUCTION

The objective of this report is to evaluate the *Land Use Planning* study programme, state code-612H91001, (hereinafter: LUP) which is taught at the Aleksandras Stulginkis University (hereinafter: ASU). The program belongs to the *Technological Sciences* Study area, the *Engineering* Study field, the volume of the study programme in credits is 240 ECTS and after the successful completion of the study programme the degree and (or) professional qualifications awarded is *Bachelor of Land Use Planning* or *Bachelor of Landscape Management* if enrolled before 2010.

The ASU offers research-based first, second and third cycle studies and is integrated by 5 faculties and two centres (Faculty of Agronomy, Faculty of Economics and Management, Faculty of Forestry and Ecology, Faculty of Water and Land Management, Faculty of Agricultural Engineering, Centre of Mathematics, Physics and Information Technology and Centre of Cultural Communication and Education), offering study programs in 10 fields directly related to rural development and administration, agriculture, aquaculture and forestry and sustainable use of natural resources in the agrarian environment.

The university study programme that was evaluated is a first study cycle programme that offers two study options: Full-time (duration of studies: 4 years), and Part-time (duration of studies: 6 years, admission before 2009 –5 years). The language of instruction is Lithuanian.

In 2012 ASU was implemented with a new structure plan and departments which resulted in being merged and transformed into Institutes. The Institute of Land Use Planning and Geomatics of the Faculty of Water and Land Management is the one that delivers most of the special education subjects of the study programme *Land Use Planning* and supervise the final thesis of the students. The Institute was created in 2012 merging the Department of Land Use Planning, the Laboratory of Geomatics and the GIS Science and Study Centre.

The study programme *Land Management* was evaluated first in 2008 in the context of the upgrade of the study programme of *Land Use Planning* and it was given a positive appraisal.

In 2011 an external evaluation of the *Land Use Planning* BA study programme was conducted by experts of the Centre for Quality Assessment in Higher Education (hereinafter: SKVC) and the study programme was accredited for a period from 16 July 2011 through 15 July 2014.

On 19th of November, 2013 - following analysis of the programme's Self-Evaluation Report (SER) and the preparation of Preliminary Reports - the Expert team: Prof. dr. Bernd Teichert (group leader), Prof. dr. Mercedes Farjas, Prof. Janusz Uriasz, Dr. Saulius Urbanas, Gražvydas Jakaitis visited Aleksandras Stulginkis University.

The visit to the University involved meetings with the following groups:

- 1. The faculty Administrative staff;
- 2. The staff responsible for preparation of SER;
- 3. The Teaching staff;
- 4. The Students:
- 5. The Alumni and graduates;
- 6. The Employers and Social partners.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

In the 2011 SKVC external evaluation of the *Land Use Planning* BA study programme, the experts assessed *Programme aims and learning outcomes* as satisfactory (2 points). They considered that aims and learning outcomes were formulated according to labour market demand but the experts considered that 'Coordinators of the programme do not present expected outcomes of study programme, so they can only be predicted by analyzing the structure and contents of study subjects and final thesis. Clear identification of the learning outcomes would help to find adequate place for many study courses, refuse some general study courses and optimize the study programme' (SER -5 ANNEX, p.282, para.1).

The Reviewers can now confirm that the programme aims and learning outcomes are well defined, clear and publicly accessible. The aim of the study programme is clearly declared: "to train land use planning specialists with profound erudition and high qualification, who are knowledgeable in modern theories and the latest technologies of the land use planning science, the principles and methods of land use, cultural landscape development, and real property management and administration, who have gained knowledge in spatial planning, land law, and cadastral surveying, who are able to analyse the land use and the land market condition, to plan rational use of land, to form land holdings, and to conduct cadastral surveying of real property and evaluation of such objects". Sub-aims of the study programme are defined according to The Dublin descriptors. The programme is in accordance with labour market demand and focused on the future jobs of the graduates (SER, p.5, para.5).

The purpose of the programme and the learning outcomes are published on the website of ASU, in promotional information for applicants (leaflets, brochures), in the Open Information, Counselling and Guidance System (AIKOS), through visits to secondary schools and by and during various events.(SER, p.7, para.7).

The aims of the programme correspond to the type and cycle of the studies, are developed pursuant legal requirements of the study programme, they are consistent with the expectations of the employers, meet the requirements of study fields and a procedure of review of learning outcomes is considered in the programme (SER, p.8, para.10).

The Reviewers can confirm that the learning outcomes, content and the qualifications offered are also compatible with each other. Reviewers found that the defined learning outcomes are in line with the programme aims and awarded qualification. Links between the sub-aims, outcomes, and subjects of the study programme are considered and analysed in the SER (SER, p.6, table.3).

The Reviewers can confirm that the programme aims and learning outcomes are based on the academic and/or professional requirements, public needs and the needs of the labour market. The fields of professional activity are considered in the aims and learning outcomes definition and is confirmed that companies and organisations of Lithuania have close cooperative relations as well as with manufacturing companies and state institutions. The programme seeks to prepare the qualified specialists and professionals necessary for the Lithuanian labour market (SER, p.5, para.6). A meeting with graduates confirmed that jobs are available in their specialist fields.

The Reviewers can confirm that there is comprehensive involvement of social partners in curriculum design and student assessment. The participation of social stakeholders is confirmed in a yearly meeting of the Faculty of Water and Land Management Council with the teaching staff and with the Committee for Final Thesis and Examination Assessment (in which members of industrial organisations participate). The academic staff of the study programme work and

discuss issues related to the improvement of the study programme in close cooperation with companies and employees. Employers express their expectations and needs in the Career Days organised yearly by ASU. They are taken into account while amending the descriptions of the study subjects and the intended programme outcomes (SER, p.8, para.10 and 11).

The Reviewers can confirm that the programme aims and learning outcomes are consistent with the type and level of studies and the level of qualifications offered. According to what the Reviewers observed from the SER and during the on-site visit, the standard of the students' work reflected a good understanding of real business world challenges. There is a good balance between the academic and the practical approaches. During the meeting with employers, they showed their satisfaction with the quality of the graduates, especially with the general training they received and the short period of time they needed to reach the required level of performance (stating they were fully competent after a maximum of six months).

The Reviewers consider that the relation between the employers and the labour market is one of the course's strong points and that the design and planning of objectives and learning outcomes are consistent with the present Market situation. Close monitoring of the technological evolution is recommended with a view to long-term planning (e.g. in digital image treatment, remote sensing and LiDAR systems).

2. Curriculum design

The Reviewers can confirm that the curriculum of LUP programme design meets legal requirements. The composition of the study programme is divided on: A- General subjects of university studies (fundamental and general courses - 18 ECTS); B- Subjects of the main study branch (land use planning), related subjects, practices, final knowledge checks (165 ECTS); C-Subjects of another study branch (geodesy) approved by the university (45 ECTS); and D-Electives (12 ECTS); giving in total programme of 240 ECTS.

During the SKVC external evaluation of the *Land Use Planning* study programme in 2011 the experts' assessed *Curriculum design* as satisfactory (2 points). They considered that the programme met legal acts requirements for study programmes, but the programme included a large number of general subject and could be improved (SER -5 ANNEX, p.282, para.2). During the meetings it was confirmed that the number of general subject of the programme was reduced, some subjects with overlapping content had been eliminated and that changes had been made to comply with recommendations made in the previous assessment. The eliminated subjects included Common chemistry, Informational technologies, Basics of economics theory, Basics of Law, Management and Environmental law; new subjects have been added: Applied informatics, Environmental and construction law, Nature Resources Economy, Regulation of Use of Natural Resources, Complex Planning of Rural Territories and Engineering Geodesy; Fundamentals of Land Use Planning, Fundamentals of Agronomy and Land Cadastre, among others, have been assigned more time in the syllabus.

The Reviewers can confirm that study subjects and/or modules are spread evenly and that their themes are not repetitive, that the content of the subjects and/or modules is consistent with the type and level of the studies and that the content of the programme and the course structure seem to be of a good standard.

Reviewers can confirm the teaching process is supported by the teaching courseware Moodle used by the academic staff and students and the content and methods of the subjects/modules are appropriate for the achievement of the intended learning outcomes.

The programme includes sufficient courses in physical science and technological science necessary to achieve the aims of the programme, to develop creative skills, and to apply the theoretical knowledge. There are also alternative and optional courses. 'The learning outcomes of the general university education are mainly included in the Year One programme, while Years 2-4 mostly focus on the subjects of the study branch and the subjects of another study branch (geodesy), which are related to land administration, land use planning, geodetic surveys, the use of geographic information systems, technical means, and legal regulation by combining them with economic, managerial, and environmental protection aspects' (SER, p.11, para. 25). The relationship between theory and practice is seen as balanced by both the Reviewers and those who attended the meetings (Alumni, graduates, social partners).

The Reviewers are in favour of the need pointed out in the SER to prepare subjects for instruction in a foreign language in order to improve the international level of the study programme. At the present time we are unable to confirm that any classes in the study programme are given in English or another foreign language.

The Reviewers consider that the content of the programme reflects the achievements in science, art and technologies, and we recommend incorporating new technologies into the teaching programme. For example, great advances are being made in Remote Sensing, which is not given much weight in the present syllabus.

We also recommend considering the possibility of incorporating specific subjects (technological ones: Remote Sensing, Images Processing, Applied GIS; or taught in foreign languages for example) to make the degree more attractive and increase the number of students in the programme.

The LUP study programme includes Full-time studies and Part-time studies. The curriculum design is the same in both options.

3. Staff

In the 2011 SKVC external evaluation of the *Land Use Planning* BA study programme the experts assessed *Staff* as good (SER -5 ANNEX, p.282, para.3).

The Reviewers can confirm that most of the subjects of the main branch of the study programme of LUP are taught by the academic staff of the Institute of Land Use Planning and Geomatics of the Faculty of Water and Land Management. The lectures are given by experienced and qualified academic staff (SER, p.16, Table 5).

The Reviewers can confirm that the study programme is provided by the staff meeting legal requirements. The academic staffs at the ASU are appointed via the procedure of open competition according to the rules defined in the Law of Higher Education and Research. Candidates must have qualifications defined in the documents approved by the University. All the academic staff meets at least the minimum qualification requirements (SER, p.16, para. 31).

The Reviewers can confirm that the qualifications and the teaching and professional experience of the teaching staff are adequate to ensure the learning outcomes (SER, Annex 3).

Academic staff' qualification is sufficient to achieve the aims of the programme and intended outcomes. In academic year 2012-2013 41 teaching staff works in this programme: 2 professors, 17 associated professors, 3 lectors with doctor's degree, 15 lectors and 4 assistants. The staff

structure conforms to the general requirements of the first cycle study programme (SER, p.16, para.30).

In the academic year of 2012-2013, 138 students were enrolled in Full-time Bachelor's studies of the *Land Use Planning* programme and 106 students were enrolled in Part-time. This academic year the ratio of the number of the full-time teacher positions and students, there were approximately 12 students per 1 teacher. The previous four academic years, when the numbers of students in this programme were higher, showed that the ratio was 15 to 16 students per 1 teacher (SER, p.16, para.33).

The Reviewers can confirm that teaching staff turnover is able to ensure an adequate provision of the programme. The structure of positions of academic staff involved in the *Land Use Planning* programme meets the requirements and remain rather stabile (SER, p.17, Table 6). The academic staff age showed that most of the staff belongs to age group of 35-45 years.

Approximately 90 per cent of subjects of the main branch are taught by academic staff whose main employer is ASU. The ratio of such academic staff and to other academic staff ensures the quality and flexibility of the study programme. The turnover of academic staff is low and has no negative impact on the quality of the study programme (SER, p.17, para.38).

The Reviewers can confirm that the higher education institution creates conditions for the professional development of the teaching staff necessary for the provision of the programme. Academic staff' professional development is pursued through participation in traineeships, workshops, training courses, cooperation and experience sharing with major professional and related enterprises, offices and institutions in Lithuania (the Ministry of Agriculture and State Enterprises) and in abroad universities; as well as participating in the activities of professional associations, public activities and studying emergent scientific literature (SER, p.18, para.40, 42). The academic staff regularly upgrades their qualifications at training courses organized by ASU and other institutions. During the last 5 years, academic staff participated in 82 training courses (SER, p.18, para.44).

The academic staffs of the Bachelor's study programme in Land Use Planning takes an active part in scientific conferences and help to organize them as the annual international scientific and methodological conferences Baltic Surveying or the biennial international scientific conference Rural Development. The academic staff made presentations at scientific conferences organized by VGTU, KTU and Šiauliai University and participated at conferences in Estonia, Latvia, the United Kingdom, Ukraine, and other countries (SER, p.18-19, para.39).

The Reviewers can confirm that the teaching staff of the programme is involved in research directly related to the study programme being reviewed. It was also clear to the Reviewers that the academic staff have connections to the corporate world through a variety of activities, such as members of the Lithuanian Union of Land Use Planning and Water Management Engineers, members of the board of this Union, members of editorial boards of scientific journals, etc. (SER, p.18, para.43). The fields of scientific research by most of the academic staff (approximately 95 percent) are directly related to the subject they teach and the research results are published in papers related to Land Use Planning (61 scientific papers, 22 popular science papers and other publications, 4 scientific research reports and 2 monographs) (SER, p.16, para.32).

The data in the SER on academic exchange of the programme academic staff are from 2012: 7 academic staff gave lectures in foreign universities and 1 Professor came from Latvia University of Agriculture to deliver lectures to the students of the evaluated programme (SER, p.17,

para.35). During the meeting with the teachers, they confirmed that they had offers of 15 agreements, but that no replacements for them were available to make long-term stays possible in international centres. It could be suggested to introduce a replacements system for the staff in order to initiate long term stays for teachers in foreign universities and research centres.

The teachers (22 attended the meetings with the Reviewers) are highly motivated, keep up-todate with advances in their subjects, take part in open days and collaborate with social partners and Alumni.

4. Facilities and learning resources

During the visit we found the premises to be undergoing renovation in order to improve the learning conditions in those buildings, the heating systems, the electric power and Internet installations. It is said that the premises will be equipped with new furniture, visualisation and other teaching aids (SER, p.20, para.50).

The Faculty of Water and Land Management participated in the project "Modernization of the Infrastructure of Science and Studies in Environmental Engineering and Landscaping" (Priority 1, Measure 1.5, No. BPD2004–ERPF–1.5.0–01–04/0011). Although the project should be completed in December 2013 (SER, p.20, para.50), during the visit the lecture and laboratory building was still being renovated and had no furniture or equipment of any kind. Since before this work started, in the 2011 SKVC external evaluation of the *Land Use Planning* BA study programme the experts assessed *Material resources* as good (3 points), 'because there are rooms for theoretical studies, some of them are renovated and equipped by proper equipment' (SER -5 ANNEX, p.282-3, para.4), the Reviewers do not negatively regard the present situation but we do underline the need to assess the renovations carried out and the final state of the installations in the next evaluation.

The Reviewers can confirm that the software equipment are adequate both in size and quality for the implementation of the programme. The students may use general software (Microsoft Office package) and special software for computer-aided design, geodesic measurement processing, land parcel planning, working with the Information System of the Real Estate Cadastre and Register, creating and editing geo-databases and analysis of geospatial data. During practical training students also have the opportunity to use Lithuanian georeference databases (SER, p.20, para.51).

After our visit, the Reviewers can confirm that the geodetic equipment is adequate both in size and quality for the implementation of the programme, having verified the existence of electronic tachymeters, GNSS receivers, laser distance meters, optical geodesic devices, levelling instruments (SER, p.20-21, para.52), as well as the recent acquisition of a new integrated total station VX-Trimble.

The Reviewers confirmed during the meetings that the Institute of Land Use Management and Geomatics signed cooperation agreements with companies. The companies collaborate with the programme in different ways as granting the right to use software (UAB Infoera), conducting maintenance of electronic geodetic instruments (UAB Geo Systems Baltija) and allowing to use instruments for practical training (UAB Cordab), etc. (SER, p.21, para.54).

The Reviewers can confirm that Moodle is used in the learning process and that students are offered a free access to the wireless network Eduroam. The Reviewers can also confirm that teaching materials (textbooks, books, periodical publications, databases) are adequate and accessible. The students of the Land Use Planning study programme use the library and the

reading rooms of ASU. The library offers different types of publications, including books, journals, newspapers, regulatory documents, dissertations, research work report, diploma papers, master's thesis and information in electronic format. The ASU library offers various foreign databases of full-text papers and journals (SER, p. 22, para. 59-60) and during the visit these statements had been confirmed.

The Reviewers can confirm that the higher education institution has adequate arrangements for students' practice. The *Land Use Planning* study programme has a training ground in an area of 10 hectares for the first year students. The second year students execute their practical training in geodetic measurements at the training ground of 25 hectares in the training farm of ASU, and the new subject Engineering Geodesy includes a 2-week practical training. They also have practical training in photogrammetry. The Institute of Land Use Planning and Geomatics also has adequate practice equipment (SER, p.21, para.55-56) and recently they bought the new technology offers by VX-Trimble. During the visit the Reviewers had the opportunity to confirm that the equipment is up to date and the amount of the equipment is enough for the study programme.

5. Study process and student assessment

In the 2011 SKVC external evaluation of the *Land Use Planning* BA study programme the experts assessed *Study process and assessment (student admission, study process, student support, achievement assessment* as 'good'- 3 points, but the following recommendations were mentioned: 'Student workload is distributed properly, but experts recommend introduce more training practice. Both academic staff and students participate in exchange programs, but passively. Experts recommend invite more academic staff from foreign countries and involve academic staff from practice', and 'It is noted that final thesis should demonstrate scientific and research content, because it is a preparation for master studies, but many theses were more case studies and only a few had the research work elements. It is recommended to improve the quality of final thesis. Student employment rate is high, but experts point out that in the future the program coordinators should focus more on preparation for master studies and specialization purification.' (SER -5 ANNEX, p.283, para.5).

As it has been indicated above, the study programme presently provide adequate practical classes and although mobility has been encouraged, more work needs to be done in this direction. The data provided in the SER on academic exchange (data from the year 2012) of the programme states that, when 7 academic staff gave lectures in foreign universities and 1 Professor came from Latvia University of Agriculture to deliver lectures to the students of the evaluated programme.

The present quality of the final thesis is of a good standard and some of the students and graduates said during the meetings that they will proceed further on to take the master's degree of this study programme.

Reviewers can confirm that two study options exist: Full-time (duration of studies: 4 years), and Part-time (duration of studies: 6 years, admission before 2009 –5 years). According to the SER, the only difference between both forms of teaching is in *Study Process and its Assessment*. It is not clear how practical classes, working experience, etc. are organized in the Part-Time course. Apart from statistical data the specific information in the SER is only the following description: 'Part-time studies are organised in the form of sessions. Classroom hours are included in training sessions, which are held twice a year at the time scheduled in the study timetables. The length of a session depends on the number of subjects taken and the contact hours, however it cannot

exceed 4 weeks. An exam session is scheduled prior to each training session, except the first. Resit is offered on Saturdays and Thursdays scheduled by the Study Office' (SER, p.38, para.156).

The Reviewers can confirm that in 2008-2013, entrants' admission of the LUP study programme was carried out according to the joint admission to Lithuanian higher schools (SER, p.23, para.65). The students who preferred the Land Use Planning programme as their first choice accounted for nearly 83.89 percent of all admitted students (SER, p.23, table 10). Admission to the LUP is regulated through a competition grade and preference is given to candidates with higher scores.

The data on admission to the Land Use Planning first year studies reveal a significant decrease in the number of admitted students: from 97 in 2008, to 20 in 2012. In Full-time mode the number of students dropped from 62 to 12 (SER, p.23, table 9 and 10); and in Part-Time new student numbers fell from 35 to 8 (SER, p.38, table 19). The fact of the high decrease in the number of students in both modes means that we must recommend that steps be taken in both attracting new students and in the programme's internal organization. Due to the decreased number of students, the levels in this area cannot be considered fully representative.

From the Full-time studies in 2008-2012, 6.46 per cent withdrew voluntarily and 8.62 per cent were excluded from the university due to various reasons (SER, p.24, table 13). In the same period 26.9 percent of students admitted to the Part-Time form of studies withdrew voluntarily or were expelled due some other reasons (SER, p.38, table 21).

In 2012 in the competition grade point of admitted Full-time students the highest competitive score to state-financed studies was 16.12 and the lowest 12.5; and the highest competitive score to paid studies was 10.0 and the lowest 4.04 (SER, p.24, table 11). About Part-time students the highest competitive score to state-financed studies was 16.12 and the lowest 12.90; and the highest competitive score to paid studies was 10.0 and the lowest 7.40 (SER, p.38, table 20).

The ratio of admitted students to the students who successfully completed the Full-time studies during the analyzed period is 73,56 percent (SER, p.24, table 12). But during the same period only 14,58 percent successfully completed the Part-time studies (SER, p.38, table 21).

During the Reviewers' meetings with the SER team, lecturers, students and Alumni, it was confirmed that the assessment system of students' performance is clear, adequate and publicly available. According to discussions in meetings with students and Alumni, all students are satisfied with the assessment system, in the knowledge that learning outcomes are assessed objectively and systematically. There were 40 participants at the students' meeting and 13 in the one with Alumni. The assessment of the final thesis takes into account the quality, its presentation, the theoretical preparation of the student, the student's ability to express one's ideas in a clear and consistent manner, the answers to the questions on the topic of the thesis, and the assessment by the reviewer (SER, p.12, para. 29).

Academic and social support of students is comprehensive and, according to students, effective, throughout the LUP Bachelor programme. During the meeting with Alumni and Employees the Reviewers found that students are able to acquire the learning outcomes set for the programme.

During the Reviewers' meetings with lecturers and students, it was confirmed that the teaching methods are adequate and that Moodle is used.

The Reviewers can confirm that students have opportunities to participate in student mobility programmes. The number of the students going abroad on exchange for Erasmus studies is

increased from 2 students in 2007-2008, up to 17 in 2012 (SER, p.30, table 15). However, there are no incoming foreign students in belonging to the LUP study programme. The study programme does not include curriculum possibilities to these students by not offering them subjects in foreign languages.

Both students and employers have a positive assessment of the practical experience offered in the course, and especially of the twice-yearly meetings between students and employers and the one month's work practice.

The Reviewers confirm the Bachelor's final thesis fit the legal requirement and they are according to aims and learning outcomes. The public defence takes place before a Committee for Final Thesis and Examination Assessment, which consists of representatives of the Faculty, scientists of other institutions and representatives of industrial organizations or social partners (SER, p.12, para. 29).

Trilateral agreements are made for the on-the-job trainings in cadastral measurements, project development, forest survey and inventory procedures (SER, p.21-22, para.58) and students and Alumni confirmed in the meetings the great results of its implementation. However the Reviewers can not confirm that students are encouraged to participate in research, artistic and applied research activities enough.

During the Reviewers' meetings with Alumni and Employers, it was confirmed that professional activities of the majority of graduates meets the programme providers' expectations. A telephone survey of Land Use Planning programme graduates is carried yearly. The research confirms that graduates of ASU engineering programmes (approximately 75%) are successfully employed or continue studies in the fields that correspond or are close to the competences developed during the programme studies (SER, p.32, para.124).

6. Programme management

In the 2011 SKVC external evaluation of the *Land Use Planning* BA study programme the experts assessed *Programme management* as good (3 points) but 'experts had doubts about future vision of the programme due to not always clear answers of academic staff. Internal study program quality assurance is carried out in accordance with the University's internal documents; however, the student's participation in these processes is quite formal. There is no feedback from students, because self-assessment report shows, that it is understood differently. The student's impact on the program development is minimal. The department actively communicates with employers and graduates discuss changes in labor market and improve the program in accordance to that. However, this process is not formalized.' (SER -5 ANNEX, p.283, para.6).

The Reviewers now can confirm that responsibilities for decisions and monitoring of the implementation of the programme are clearly allocated. As it was explained in the SER and also during the visit, the Committee of the study field of Land Use Planning supervises the development and implementation of the study programmes of the Faculty, assesses their quality and coordinates their improvements. The Committee consists of leading scientists in the programme field, employers and student representatives. The assessment of the quality of the study programme follows the University procedure (SER, p.33, para.127).

The Reviewers observed strong commitment by stakeholders to the implementation of the LUP Bachelor programme. There also appears to be a strong and active link between programme lecturers and the regional business community.

The LUP Bachelor programme collects a large set of information about students, staff and external stakeholders; this information is also available to the relevant organizational units. The Reviewers are of the opinion that the inclusion of different perspectives is strong.

The Reviewers can confirm that information and data on the implementation of the programme are regularly collected and analysed. Student surveys on the teaching quality and study subjects are conducted on a yearly basis, while teacher surveys are carried out every second year (SER, p.33, para.128). Information about the study quality is included in the annual ASU and the Faculty of Water and Land Management reports which are discussed during the meetings of the University and the Faculty community, respectively. Information about the quality of individual subjects is collected in the academic staff's certification process. The collected information is processed and presented to the teacher certification committees. Summarised results are reviewed during study quality events. Information on the studies, their challenges and quality improvement is regularly communicated to the employers (the National Land Service under the Ministry of Agriculture, the public enterprise the State Land Fund) during the events of the Career Days organised by the Faculty and various professional meetings (SER, p.37, para.147).

During the meetings, the students, teachers, employees and Alumni confirmed that the ASU Studies Division conducts a systematic survey, that a graduate survey on study quality issues is conducted during the period of final thesis defence and exams (Study Quality Questionnaire for Graduates), that a telephone survey on the employment of the Faculty's graduate's takes place half a year after the completion of the studies.

The main changes determined by the results of the last external evaluation in 2010 were explained during the meetings and confirmed the description in the (SER, p.37 para.148): the aims of the study programme and the anticipated learning outcomes were revised; the number of general education subjects and credits were reduced; scientists got engaged in international research and their scientific articles were published in international journals; the participation in exchange programmes among the students and academic staff in particular became more active; cooperation with students and manufacturers aimed at programme improvement was further developed.

The Reviewers can confirm that the evaluation and improvement processes involve stakeholders. Future employers of land use planning specialists take an active part in the teaching process by cooperating with the academic staff and discussing the study programme. Particularly close contacts of cooperation are maintained with social stakeholders and future employers from the National Land Service under the Ministry of Agriculture, state enterprises the Centre of Registers and the State Land Fund, the Institute of Aerial Geodesy, UAB and other private companies. Their representatives are invited to participate in the Committee for Final Thesis and Examination Assessment. The programme cooperate with other Lithuanian Associations to make sure that the graduates are able to conduct industry related tasks, which enjoy a huge demand, to respond to changing conditions in a flexible way and to take innovative approach.

During the meeting with the social partners, the latter showed their satisfaction with the level of expertise of the graduates and confirmed that they would continue to participate in the programme in the form of: twice-yearly meetings, committees, contact with teachers and students, work practice, etc. They closely monitor any improvements and changes carried out in the course and many of their suggestions are implemented in the programme.

After the visit held on 19th of November 2013, the Reviewers concluded that the internal quality assurance measures are effective and efficient. During the Reviewers' meetings with the different groups, it was confirmed that they were able to express their opinions freely, were

familiar with the internal workings, results were freely accessible and they were committed to the degree course.

III. RECOMMENDATIONS

- 1. Use the good relations with social partners to identify the need for changes to the curriculum as regards new technologies and to monitor tendencies in order to detect possible new short or long-term markets.
- Include subjects taught in foreign languages to attract students from other countries (Erasmus or other exchange programmes). At the present time no foreign languages are offered in the course syllabus.
- 3. Encourage long-durations stays by teachers at centres abroad and the number of visiting foreign teachers at the centre (in 2012 there was only one) in order to the updating of the program, to share lecturing experience, etc.
- 4. The building, classroom and laboratory equipment renovation project was still ongoing at the time of the Reviewers visit. During short time the person in charge of the programme should constantly supervise the final state of the project if possible.
- 5. Define proposals for actions designed to increase new-student numbers. Some of the most important aspects might include: greater international projection for the programme, new subjects of special interest, an analysis of full and part-time students, etc.

IV. SUMMARY

The Land Management BA study programme is taught at the Aleksandras Stulginkis University. The program belongs to the Engineering Study field. After the successful completion of the 240 ECTS study programme the degree and professional qualifications awarded is Bachelor of Land Use Planning or Bachelor of Landscape Management if enrolled before 2010. The Institute of Land Use Planning and Geomatics of the Faculty of Water and Land Management is the one that delivers most of the special education subjects of the study programme and supervise the final thesis of the students.

The Reviewers can confirm that the programme aims and learning outcomes are well defined, clear and publicly accessible. The aims of the programme correspond to the type and cycle of the studies and are developed pursuant legal requirements of the study programme. The learning outcomes, content and the qualifications offered are also compatible with each other, and the programme aims and learning outcomes are based on the academic and/or professional requirements, public needs and the needs of the labour market. The relationship with employers and the labour market is one of the study programme's strong points. When designing the curriculum we recommend monitoring new technologies in specialist fields (e.g. digital image treatment techniques, remote sensing and LiDAR systems).

The Reviewers can confirm that study subjects and/or modules are spread evenly and that their themes are not repetitive, that the content of the subjects and/or modules is consistent with the type and level of the studies and that the content of the programme and the course structure seem to be of a good standard. The teaching process is supported by the teaching courseware Moodle

used by the academic staff and students and the content and methods of the subjects/modules are appropriate for the achievement of the intended learning outcomes. The programme includes sufficient courses in physical science and technological science necessary to achieve the aims of the programme, to develop creative skills, and to apply the theoretical knowledge. We believe there is a good balance between theoretical and practical aspects. No foreign language training is on offer.

The lectures are given by experienced and qualified academic staff and its turnover is able to ensure an adequate provision of the programme. The academic staff takes an active part in scientific conferences. The higher education institution creates conditions for the professional development of the teaching staff necessary for the provision of the programme. We believe it is particularly important to increase the international projection of the study programme, including stays by teachers at foreign universities and organizing replacement teachers to make possible long-term stays at these centres.

The buildings are at present undergoing renovation. The software equipment are adequate both in size and quality for the implementation of the programme and the geodetic equipment are adequate both in size and quality for the implementation of the programme. The teaching materials are adequate and Moodle is used in the learning process. The library offers different types of publications and various foreign databases. The higher education institution has adequate arrangements for students' practice.

The data on admission to the Land Use Planning first year studies reveal a significant decrease in the number of admitted students. The Reviewers consider this the programme's greatest weakness and priority should be given to its improvement.

The assessment system of students' performance is clear, adequate and publicly available. The personal development of the students is in line with the learning outcomes set for the programme. The teaching methods are adequate. The students have opportunities to participate in student mobility programmes, the number of the students going abroad on exchange for Erasmus studies is increased but there are no incoming foreign students belonging to the LUP study programme.

The practical training provided by the course is positively assessed by both students and employers. We recommend encouraging students to participate in research, artistic and applied research activities.

Professional activities of the majority of graduates meet the programme providers' expectations.

The responsibilities for decisions and monitoring of the implementation of the programme are clearly allocated. The assessment of the quality of the study programme follows the University procedure.

One of the programme's strong points is its strong and active link commitment by stakeholders to the implementation of the LUP Bachelor programme. The LUP Bachelor programme collects a large set of information about students, staff and external stakeholders; this information is also available to the relevant organizational units. The Reviewers are of the opinion that the inclusion of different perspectives is strong.

V. GENERAL ASSESSMENT

The study programme *Land Management* (state code – 612H91001) at Aleksandras Stulginskis University is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	3
	Total:	18

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

Grupės vadovas: Team leader: Prof. dr. Bernd Teichert

Grupės nariai: Team members:

Prof. dr. Mercedes Farjas

Prof. Janusz Uriasz Dr. Saulius Urbanas Gražvydas Jakaitis

^{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.

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Aleksandro Stulginskio universiteto studijų programa *Žemėtvarka* (valstybinis kodas – 612H91001) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	3
3.	Personalas	3
4.	Materialieji ištekliai	3
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	3
	Iš viso:	18

- * 1 Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)
- 2 Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)
- 3 Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)
- 4 Labai gerai (sritis yra išskirtinė)

<...>

IV. SANTRAUKA

Žemėtvarkos studijų bakalauro programa vykdoma Aleksandro Stulginskio universitete. Programa priklauso inžinerijos studijų krypčiai. Sėkmingai baigus 240 ECTS studijų programą ir įstojus iki 2010 metų, bus suteikiamas Žemėtvarkos studijų bakalauro arba Kraštotvarkos bakalauro kvalifikacinis laipsnis ir profesinė kvalifikacija. Vandens ūkio ir žemėtvarkos fakulteto Žemėtvarkos ir geomatikos institutas – tas struktūrinis padalinys, kuriame dėstoma dauguma studijų programos specialiųjų dalykų ir kuris prižiūri studentų baigiamuosius darbus.

Ekspertai gali patvirtinti, kad programos tikslai ir studijų rezultatai yra gerai apibrėžti, aiškūs ir viešai prieinami. Programos tikslai atitinka studijų tipą ir pakopą ir yra parengti pagal studijų programos teisinius reikalavimus. Studijų rezultatai, turinys ir siūlomos kvalifikacijos tarpusavyje suderinti, o programos tikslai ir studijų rezultatai grindžiami akademiniais ir (arba) profesiniais reikalavimais, visuomenės poreikiais ir poreikiais darbo rinkoje. Santykiai su darbdaviais ir darbo rinka – viena iš studijų programos stipriųjų pusių. Rengiant programą rekomenduojame atsižvelgti į naujas technologijas profesinėse srityse (pvz., skaitmeninių vaizdų apdorojimo būdus, nuotolinio stebėjimo ir LiDAR sistemas).

Ekspertai gali patvirtinti, kad studijų dalykai ir (arba) moduliai yra paskirstyti vienodai, jų temos nesikartoja, dalykų ir (arba) modulių turinys atitinka studijų tipą ir lygmenį, programos turinys ir kursų struktūra, atrodo, yra gera. Studijų procese naudojama Moodle mokymosi aplinka, kuria naudojasi dėstytojai ir studentai, o dalykų ir (arba) modulių turinys bei metodai yra tinkami numatomiems studijų rezultatams pasiekti. Į programą įtraukta pakankamai fizinių mokslų ir technologijų mokslo dalykų, būtinų programos tikslams pasiekti, kūrybiniams gebėjimams ugdyti ir teorinėms žinioms taikyti. Manome, kad teoriniai ir praktiniai aspektai gerai suderinti. Tačiau mokytis užsienio kalbų nėra siūloma.

Paskaitas skaito patyrę ir kvalifikuoti dėstytojai, o jų kaita gali užtikrinti tinkamą programos dėstymą. Akademinis personalas aktyviai dalyvauja mokslinėse konferencijose.

Aukštoji mokykla sudaro sąlygas akademinio personalo profesiniam tobulėjimui, kuris būtinas vykdant programą. Manome, kad ypač svarbu plėsti studijų programos tarptautinį aspektą, įskaitant dėstytojų buvimą užsienio universitetuose ir užtikrinant pakaitinius dėstytojus, kad dėstytojai galėtų ilgiau likti centruose užsienyje.

Pastatai šiuo metu yra renovuojami. Programinė įranga savo apimtimi ir kokybe yra tinkama programai vykdyti, o geodezinių prietaisų kiekis ir kokybė tinkama programai įgyvendinti. Studijų medžiaga gera, mokymosi procese naudojama Moodle aplinka. Biblioteka siūlo įvairių leidinių ir įvairių užsienio duomenų bazių. Aukštojo mokslo įstaiga turi atitinkamus susitarimus studentų praktikai atlikti.

Priėmimo į Žemėtvarkos studijas pirmo kurso duomenys rodo ženklų priimtų studentų skaičiaus mažėjimą. Ekspertai mano, kad tai – didžiausia šios programos silpnybė ir šiai problemai spręsti turi būti teikiama pirmenybė.

Studentų vertinimo sistema aiški, tinkama ir viešai prieinama. Studentų asmeninis tobulėjimas atitinka programoje nustatytus studijų rezultatus. Dėstymo metodai tinkami. Studentai turi galimybę dalyvauti studentų judumo programose, padidėjo į užsienį pagal Erasmus mainų programą išvykusių studentų skaičius, tačiau nėra užsienio studentų, atvykstančių į Žemėtvarkos studijų programas.

Praktinį mokymą teigiamai įvertino tiek studentai, tiek darbdaviai. Rekomenduojame skatinti studentus dalyvauti mokslinių tyrimų, meninėje ir taikomųjų mokslinių tyrimų veiklose. Daugumos absolventų profesinė veikla atitinka programos dėstytojų lūkesčius.

Atsakomybė už sprendimų priėmimą ir stebėseną, įgyvendinant programą, yra aiškiai nustatyta. Studijų programos kokybės vertinimas atliekamas laikantis Universiteto nustatytos tvarkos.

Viena iš programos stipriųjų pusių – tvirtas ir aktyvus socialinių partnerių įsipareigojimas vykdyti Žemėtvarkos bakalauro programą. Žemėtvarkos bakalauro programa renka daug informacijos apie studentus, darbuotojus ir išorės socialinius partnerius. Šia informacija taip pat gali naudotis atitinkami organizaciniai padaliniai. Ekspertų nuomone, pakankamai daug įtraukta skirtingų perspektyvų.

III. REKOMENDACIJOS

- 1. Pasinaudokite gerais ryšiais su socialiniais partneriais ir nustatykite, ką reikėtų keisti studijų programoje, kas susiję su naujausiomis technologijomis, ir stebėkite tendencijas, kad galėtumėte nustatyti galimas naujas trumpalaikes arba ilgalaikes rinkas.
- 2. Įtraukite užsienio kalbomis dėstomus dalykus ir pritrauksite studentus iš kitų šalių (pagal Erasmus ar kitas mainų programas). Šiuo metu kurso programoje nėra siūloma užsienio kalbų.
- 3. Skatinkite ilgalaikius dėstytojų buvimus centruose užsienyje ir didinkite kviestinių užsienio dėstytojų skaičių centre (2012 m. buvo tik vienas), siekiant atnaujinti programą, keistis dėstymo patirtimi ir t. t.
- 4. Ekspertų vizito metu pastato, auditorijų ir laboratorinės įrangos atnaujinimo projektas vis dar buvo vykdomas. Nors ir trumpai, tačiau už programą atsakingas asmuo turėtų nuolat prižiūrėti, kaip vykdomas projektas, jei tai yra įmanoma.
- 5. Pateikite siūlymus, kokių reikėtų imtis veiksmų siekiant padidinti naujai stojančių studentų skaičių. Kai kurie iš svarbiausių aspektų gali būti šie: suteikti programai platesnį tarptautinį aspektą, siūlyti naujus ypač įdomius dalykus, atlikti nuolatinių ir ištęstinių studijų studentų analize ir t. t.