STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Aleksandro Stulginskio universiteto

STUDIJŲ PROGRAMOS *TRANSPORTO INŽIENRIJA (612E20003)* VERTINIMO IŠVADOS

EVALUATION REPORT OF *TRANSPORT ENGINEERING* (*612E20003*) STUDY PROGRAMME

at Aleksandras Stulginskis university

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Išvados parengtos anglų kalba
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DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Transporto inžinerija
Valstybinis kodas	612E20003
Studijų sritis	Technologijos mokslai
Studijų kryptis	Sausumos transporto inžinerija
Studijų programos rūšis	universitetinės studijos
Studijų pakopa	Pirma
Studijų forma (trukmė metais)	Nuolatinė (4)
Studijų programos apimtis kreditais	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Sausumos transporto inžinerijos bakalauras
Studijų programos įregistravimo data	2012-05-31

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	Transport Engineering
State code	612E20003
Study area	Technological studies
Study field	Transport engineering
Type of the study programme	University studies
Study cycle	First
Study mode (length in years)	Full time (4)
Volume of the study programme in credits	240
Degree and (or) professional qualifications awarded	Bachelor in Road Transport Engineering
Date of registration of the study programme	May 31, 2012

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I. INTRODUCTION

1.1. Background of the evaluation process

The evaluation of on-going study programmes is based on the **Methodology for evaluation of Higher Education study programmes,** approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC).

The evaluation is intended to help higher education institutions to constantly improve their study programmes and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.*

On the basis of external evaluation report of the study programme SKVC takes a decision to accredit study programme either for 6 years or for 3 years. If the programme evaluation is negative such a programme is not accredited.

The programme is **accredited for 6 years** if all evaluation areas are evaluated as "very good" (4 points) or "good" (3 points).

The programme is **accredited for 3 years** if none of the areas was evaluated as "unsatisfactory" (1 point) and at least one evaluation area was evaluated as "satisfactory" (2 points).

The programme **is not accredited** if at least one of evaluation areas was evaluated as "unsatisfactory" (1 point).

1.2. General

The Application documentation submitted by the HEI follows the outline recommended by the SKVC. Along with the self-evaluation report and annexes, the following additional documents have been provided by the HEI before, during and/or after the site-visit:

No.	Name of the document
1	Faculty Strategy plan 2015-2020
2	Labour market research questionnaires
3	Student questionnaires
4	Marketing plan 2015-2016
5	HEI methodology for recognition for prior learning
6	List of teachers participated in Erasmus mobility

1.3. Background of the HEI/Faculty/Study field/ Additional information

Aleksandras Stulginskis University (hereafter – ASU) is a state institution of higher education and research, which is distinguished by its unique mission from other Lithuanian institutions. Its mission is directly related to agricultural manufacturing, agricultural machinery design and assurance of its reliability, sparing use of natural resources and a significant role in modernizing agricultural machinery. Four faculties are engaged in the study programme of *Transport Engineering*, the main being the Faculty of Agricultural Engineering.

The study programme *Transport Engineering* was first accredited in 2012. The graduates of the study programme are about to be employed in various institutions ranging from large-scale companies to private small enterprises. However, there are no final results to be evaluated yet, as first graduates of the *Transport Engineering* study programme are expected in 2016.

This evaluation report is based on the Self-evaluation report submitted by ASU and a visit to the university by the review team on 24th November 2015, during which relevant facilities were visited, the students' term and course papers along with some examination material were reviewed, and discussions were held with the following groups:

- senior management and faculty administration,
- staff responsible for the preparation of SER,
- teaching staff of *Transport Engineering* study programme,
- students of *Transport Engineering* study programme, and
- social partners.

1.4. The Review Team

The review team was completed according *Description of experts' recruitment*, approved by order No. 1-01-151 of Acting Director of the Centre for Quality Assessment in Higher Education. The Review Visit to HEI was conducted by the team on *24/11/2015*.

1. **Prof. Dr. Clive Neal-Sturgess (team leader)** Emeritus Professor of Mechanical Engineering, University of Birmingham (UK)
2. **Prof. Dr. Jochim Haldor** Professor of Railway and Transport Planning, Aachen university of Applied sciences (Germany)
3. **Mr. Ger Reilly,** Head of School, Mechanical & Design Engineering Dublin Institute of Technology (Ireland)
4. **Prof. Dr. Bojan Dolšak,** Dean of the Faculty for Mechanical Engineering, University of Maribor (Slovenia)
5. **Mr. Audrius Jasėnas,** Director of public establishment "Intechcentras" (Lithuania)
6. **Ms. Monika Simaškaitė,** Student at Kaunas Technical university (Lithuania)

II. PROGRAMME ANALYSIS

2.1. Programme aims and learning outcomes

The programme aim is to prepare bachelors of land transport engineering, which are "able to apply knowledge and abilities based on theoretical understanding and critical thinking, demonstrate abilities of autonomous problem-solving and implement the activities in specialized working places and studies related to the technological devices of car transport, agricultural transport and transport, as well as disseminate information of the aforesaid activity" (SER, p. 7).

There are 23 learning outcomes (hereafter – LO) indicated in SER which correspond to 3 sub-goals of the study programme. In general, those LO are consistent with the programme aims and objectives and are described comprehensively but not very clear using rather opaque university-specific format instead of Dublin-style table. The review team feels that there is a need to review the description of programme LO in order to express them in a more coherent form. They should be more focused and reduced to a reasonable set of LO that can be assessed. The university could also be more proactive in planning the LO for practical students' training.

Relative information about the programme's aims, LO, study plan and even information about Study Programme Committee is provided both on Lithuanian and English pages of the ASU website (http://asu.lt/wp-content/uploads/2015/06/TRANSPORT-ENGINEERING.pdf) where the expected competencies and skills to be acquired by the graduates of the programme, along with a description of the various types of potential employment positions are described. However, the text on the website slightly differs from the one presented in SER and is considered maybe as an error in translation.

The programme management undertook market research by analysing 23 responses in paper form and about 20 online answers received from various types of companies related to transport. Upon this survey, it was concluded that "the goals of the study programme *Transport Engineering* are transparent and conform to the needs of labour market" (SER, p. 6).

Several programmes in the field of land transport engineering that are offered in other Lithuanian universities have been identified and listed in the SER. Yet the most distinctive feature of this study programme according to the programme managers is that it focuses on agricultural transport while others aim more at road, city and railway transport, as well as engineering of transport technological devices. The review team would suggest analysing similar study programmes offered in neighbouring countries, or in Europe, in order to make a comparison. A formal benchmarking against those considered as the best should be taken in an upcoming programme review.

The aims and LO are generally set at proper level for a first cycle study programme according to Dublin Descriptors, the Lithuanian Qualifications Framework, and other relative regulations. However, the LO should be revised as mentioned above and clarified, especially for the internships, ensuring the students will meet them while being on the placement.

At first sight, the title of the study programme, it's aims and objective and the associated LO seem to be compatible with each other and with the qualification offered. The programme (though not clearly visible from it's name) attempts to distinct itself from similar programmes in

transport engineering field by putting special emphasis in agricultural transport and by offering students the opportunity to learn how to adapt the transport for agricultural specifics.

However, the focus of the programme has to be revised to make it clearer. After the onsite visit and interviews, the review team came to the conclusion that the programme is focused mostly on mechanical engineering with a specialisation in agricultural machinery. The review team acknowledges the need to share modules with other study programmes offered by ASU, but the ASU should also consider giving more emphasis to transport related subjects earlier in the programme, as in present the vast majority of the study in the first two years is the same as for the Mechanical Engineering programme. Thus, the name of the study programme being evaluated, its content and its LO are not fully compatible with the qualifications offered and need to be aligned.

2.2. Curriculum design

The structure of curriculum conforms to the ECTS system, meets legal requirements and the programme fully complies with the General Requirements of Lithuanian regulations for Higher Education.

The total workload of 240 ECTS is allocated equally among 8 semesters for a full-time study programme. Part-time studies are not offered, as there is not enough demand while streaming of both groups would not be feasible.

Each of 8 semesters includes no more than 7 study subjects which meets all formal regulations. The semesters 4 and 6 comprises mandatory internships (accounting for 15 ECTS in total) and the writing of bachelor thesis (accounting for 12 ECTS) is foreseen in semester 8. General university education subjects contain 21 ECTS, subjects of the study field contain 194 ECTS.

The study subjects follow a smooth progression in terms of building knowledge and competencies. Students are given an opportunity to choose one elective study subjects in the 3rd, 4th, 5th and 6th semester and also to deepen their specialization by choosing either land transport or engineering systems field. Study of a foreign language is obligatory for all students.

It seems that a great amount of work went into developing descriptors for each course of the programme. The descriptors clearly state the LO of the corresponding subject, the content and the learning activities that support the LO, indicative self-study effort related to learning activities, methods of assessment and assessment criteria. As long as this work reflects a collective effort of the majority of the staff, it provides the right basis for further development.

The review team would like to emphasize the need for continuous monitoring and review of the association between assessment methods and LO, and advise towards the employment of a multitude of assessment methods with less weight given to final exam to the favour of other forms of assessment. Also, the course descriptors should continuously be updated so that teaching materials include recent books and e-books and especially recent articles from business and scientific journals that reflect new developments and trends in transport engineering.

A scheme that maps sub-goals of the programme with the intended LO and the study subjects is presented in the SER (p. 8). However, it would also be wise to map subject specific LO with the corresponding methods of teaching and assessment.

The curriculum provides a good foundation of general knowledge in core subjects. Study area subjects cover the typical topics in transport engineering. There is however a need to increase studies on diagnostics, logistics and legal aspects of the transport and logistics as it was also identified in the meeting with social partners.

The knowledge of foreign language seems also not to be sufficient (during the site visit some of the students were not confident to communicate in English), which may be one of the reasons for low student mobility. ASU should think about how to create conditions for students to develop better foreign language skills, possibly also in Russian, as a considerable part of Lithuanian business/transport activities with neighbouring Russian speaking countries exists.

The internships and the writing of Bachelor thesis serve to integrate knowledge with practice and in building research skills. However, due the evaluation timing expert team did not have a chance to review final theses, as there are no graduates in this programme yet.

The sequence of the subjects provides students with a solid background in research methodologies, and prepares those who may want to continue for their studies at post graduate level. Overall, the scope of the programme provides the breadth and the depth needed to achieve the learning outcomes.

The SER provides no information on how the study programme reflects to the latest achievements in science and technologies. During the site visit, the review team was not able to confirm that the latest achievements of sciences are introduced to the students during the lectures and seminars which needs to be addressed. However, in the interim the students are acquainted with some latest achievements of technologies during their practical placement.

2.3. Teaching staff

The composition of the teaching staff on the study programme *Transport Engineering* fully complies with the requirements set by Lithuanian regulations for first cycle study programmes, that is, more than half of the study field subjects (62%) are taught by teachers who have a PhD degree (7 professors, 12 associate professors and 2 lecturers out of 34 staff members, according to SER, p. 16). However, the list of teachers presented in Annex 3.4 contains 36 staff members, while the list of teacher's CVs presented to the review team in Annex 3.5 contains 33 teachers which is misleading. At the site visit the number of 33 teachers was confirmed (7 professors, 14 associate professors and 12 lecturers).

The programme is supported by an adequate number of teachers, both academic and practitioners in order to deliver the intended LO. Overall, the composition of the staff presents a strong advantage for the programme as on average all 33 teachers have at least 20 years of pedagogical work experience (only 3 of them have less than 10 years of pedagogical work experience). According to Annex 3.4, 20 teachers have practical work (professional activity) experience in the fields that suit the programme's disciplines. However, this is not clearly visible in the teachers'

CV's (Annex 3.5), which are not presented uniquely for all the teachers and do not give reasonably comparable information. It also seems that teaching staff also provides a rich variety of ages, academic and contextual backgrounds and a balanced representation of experiences both, in established approaches and current trends in transport engineering.

There are some examples of participation of practitioners within the programme, which is appreciated by the students. However, there is no information provided in SER nor received during the site visit on foreign lecturers invited from abroad as visiting teachers or under the Erasmus mobility scheme which have delivered certain courses or at least parts of it. It seems that lectures delivered by foreign lecturers are limited to annual conference organised at ASU.

It is mentioned in SER (p. 18) that teachers of *Transport Engineering* study programme participate in the Erasmus mobility programmes (no numbers presented). At the site visit, a list of 21 visits for the last three years was presented to the review team. The majority of those visits were related to research projects.

It is stated in SER that the number of teachers reduced from 43 to 34 due to general redundancy of university teachers and also a decrease in number of students (p. 16, 17). Together with the discrepancies in the reported number of the teaching staff, as pointed out before, the ratio of students to full time equivalent staff is better than national standard. The normal ratio of students and teachers in the field of technology according to Lithuanian legislation is 12:1, however it is stated in SER (P. 17) that "the number of students for one teacher working on regular basis at FAE surpassed 1.3 times".

It is unclear from the SER what is the actual turnover of teachers working in the programme of *Transport Engineering*. There is only a short note on the number of professors that remained the same during the evaluation period (year 2012-2015) and the number of associate professors decreased from 23 to 14. However, due to the fact that the programme is still young, significant teaching staff turnover shall not be expected.

The impression is that both the management of ASU and the management of the programme recognize the importance of staff qualification and development. According to SER, "qualification improvement is planned annually and presented in the "*Individual Assignments for Teachers*" (p. 18) as well as monitored by attestation of teachers' pedagogical, methodological and scientific work every 5 years. It seems that teachers are encouraged to take part in various events inside and outside the institution: they organise conferences, participate in various Committees and attend courses. It is worth noticing that 9 lecturers within the programme meet the requirements for doctoral studies (SER, p. 18) and there are 5 doctoral students at the faculty.

According to the teachers, their professional development has to be initiated by them, while the institution provides an adequate support. There is an evidence of a good working climate between the academic staff and the management. More could be done to improve the overall knowledge of English within the teaching staff.

Although it is mentioned in SER that "almost all teachers of the study programme improved their abilities in the spheres of the taught study subjects or research interests within the assessment period" (p. 18) it seems that their activities are mainly related with preparation of methodological material or course books translation from foreign languages. No clear evidence on scientific research projects was provided.

It seems that there is a lack of research strategy that would aim in creating clusters of staff / researchers focusing on research and innovation that will give a research identity to the programme. The development of common research interest groups would increase team coherence, enhance the identity of the programme, enable staff to join research consortiums and exploit research funding that is available at European level, while at the same time will create opportunities for the students.

To sum up, it may be stated that the adequate academic staff resources that need to be further developed are ensured for the implementation of the programme.

2.4. Facilities and learning resources

In general, the facilities of the ASU that are used for the delivery of the programme are adequate and technologically modern.

The ASU library (with more than 150 thousand copies of publications, 2 reading rooms with 237 workplaces, out of which 30 have computers with wireless internet access) is available for students of *Transport Engineering*. All visitors of the library have free access to the internet and ability to print out the materials.

During the site visit, the review team got the information that ASU also holds a working farm used by the mechanical engineering students. The students of *Transport Engineering* study programme could also benefit from the use of the farm, especially since the programme is supposed to be oriented mainly in agricultural transport.

The studies are implemented in the classrooms and laboratories on the premises of 3 different faculties (Agricultural Engineering; Water and Land Management; Economics and Management) and 2 centres (Mathematics, Physics and Information Technologies; Cultural Communication and Education) around the university. Most of the lectures, seminars and laboratory works are taking place in buildings No. 2 and No. 3, which have enough spacious rooms with necessary equipment (visual aids, internet, stands and models).

During the site visit, the review team saw the example of the lecture room fully renovated and equipped (also with a new tractor) by one of the social partners, which represents an example of excellent relationship with social partners, also including provision of equipment. Due to the limited partners' support options the review team would like to encourage the management to increase the number of applications to the EU Structural Funds.

Students' internship is a part of the study programme during which the basic professional knowledge, skills and abilities acquired by a student from the study programme are consolidated, adapted and developed in professional activities. Two internships are organized for students during the 4 years of *Transport Engineering* study programme: Technological practice (6 ECTS) and Engineering design practice (9 ECTS).

It is stated in SER that "all the students of the study programme have favourable conditions to conduct their practice: the number of companies is sufficient; the geographical spread of companies is extensive (the students have a possibility to choose a company for practice with regard to their living place)" (p. 21). According to the students, the number of placements is sufficient and companies are related not only to general transport, but also to agricultural

machinery. A list of 17 different practice placement enterprises (mostly car selling and service companies) was provided at the site visit.

According to the SER ASU library has sufficient number of books, textbooks and periodicals available for students. Library provides access to 17 different electronic databases. The number of staff employed in the library ensure proper availability of library.

ASU has participated in several different projects (from 2006 to 2013) which allowed to renew the library infrastructure and also to purchase the teaching material necessary for implementation of *Transport Engineering* study programme (for example, the library was supplemented by publications of 43 titles related to the subjects of the study programme and purchased 15 new course books in foreign language). Additionally, staff engaged in delivery of the programme develop a proper amount of their own teaching materials (course books and teaching aids).

2.5. Study process and students' performance assessment

Admission requirements are set following the admission procedure approved by Association of Lithuanian Higher Education Institutions for joint admission organisation (LAMA BPO) and "Rules of Student Admission to First-Cycle (Bachelor) Study Programmes at Aleksandras Stulginskis University" (available online) and are appropriate for the type and orientation of the study programme.

The number of students admitted in the programme has been changing since the introduction of the programme (13 students in 2012, 12 students in 2013, 26 students in 2014 and 18 students in 2015). The main reasons for these changes are demographics, and state funding policy. In 2015 only 1 state financed student was admitted out of 18. The numbers of students that are admitted to state non-financed places are increasing; however, the competitive score diminished. The programme is still very young, but it seems that current number of students enrolled is just sufficient to sustain a strong academic student community.

The study process serves the aims and objectives of the programme. There is a right blend of academics and practitioners in the teaching staff, however the additional involvement of specialists as guest lecturers, as well as participation of foreign professors would be welcome.

The SER does not provide information on the learning activities included in the study process. However the review team observed during the site visit that the students are generally happy. Their only serious remark was about the time of their placements, which took place in summer time when they would like to have holidays.

Internship arrangements and activities are organised and coordinated by a Career Centre (website available only in Lithuanian). The general impression of the review team is that the objectives and associated tasks, eligibility criteria, performance criteria, the monitoring process, the role of the institutions and supervisors, assessment process, and the reporting requirement are not stated clearly for both, students and companies. Engineering design practice should be taken into consideration with a special care, as there is very little evidence of engineering design practice performance so far. Moreover, the expected LO to be achieved during the placement are not

clearly defined. Thus, the institution is strongly advised to organise internships more precisely to avoid different interpretations.

The student drop out numbers are relatively high (20 percent of students enrolled in the programme since 2012 has terminated their studies). According to SER and also following the answers at several interviews the main reason for that besides the academic failure is lack of motivation and financial reasons (emigration).

It seems that the participation of students in research is rather limited. Their main anticipated research activity is writing their bachelor thesis which hasn't taken place yet. Some other opportunities are offered in the research laboratories of the faculty but only for "most advanced students of senior years and Master degree students" (SER, p. 22).

ASU has established 82 agreements with partner universities in Europe under the Erasmus mobility scheme, while the International Department is responsible for organizing meetings with students in order to introduce the possibilities of such participation (SER, p.26). However, the information provided in SER covers only general numbers of 15 first cycle and 8 second cycle students in the Faculty who have gone on Erasmus exchange trips since 2011 (SER, p. 25). No information on the number of students of *Transport Engineering* study programme participating in Erasmus is provided.

The main reason of students avoiding the possibility to go abroad seems to be the lack of foreign language skills and financial reasons. In order to raise students' interest in international mobility it is suggested that the university organise events where students returning from spending a period abroad share their experience with new students.

Initial student orientation is achieved through an introductory course which provides "knowledge about the main features of the study field (branch), as well as traditions and system of studies and science" (SER, p. 26). The annual publication 'ASU pirmakursiui' (*For the First Year Student of ASU*) containing information on the study programme and study process is also publicly available.

The mentor of the programme provides consultations on matters related to the programme during the study period, while a certain amount of consulting hours is provided for each course which are used by lectures for supporting their students. Study related information material is available on the Moodle platform.

The programme management team also provides academic support and shows care in improving the study process by organising additional courses of Mathematics, Physics, Chemistry and Foreign language for first year students so that those entering with lower scores at those subjects could catch up during the year. The students seem to be very satisfied with this opportunity.

A clear assessment scheme is provided in each study subject description. Generally, there is a plurality in assessment methods, appropriately chosen, based on the type of each subject, with a clear marking scheme. However, the way how numerous LO's are assessed is not clear enough.

According to the students, the lecturers present the schedule of the topics, attendance requirements, teaching methods, examination requirements and assessment criteria during the first class of each semester.

Concerning the final thesis, as the first graduates of the *Transport Engineering* study programme will finish their studies in 2016, there are no results to be evaluated yet. However, the expectations of social partners are positive.

2.6. Programme management

At programme level a coherent programme management structure is in place with clear allocation of duties and responsibilities. Study Programme Committee ensures the alignment of the programme's aims and objectives to the ASU strategy. All programme stakeholders – teachers, students, and social partners – except alumni (not existing due to lack of graduates) are represented in the Committee.

The responsibility of collection and analysis of data and monitoring the key indicators lies with the Centre of Innovations and Study Quality. Data is collected regularly including surveys of students, teachers, graduates and social partners. It is stated in SER that "results of quality assessment is subject to public presentation: it is discussed with the students, in department meetings, meeting of the Faculty Council and academic community" (p. 30). However, dissemination of the information seems to be a week point, as most of the stakeholders have very limited knowledge about what is really going on (many of them even have not heard about the SER).

SER gives the impression that all information received on the quality of the implementation of the study programme, together with students', teachers' and employers' proposals as well as the conclusions of internal quality assessment are discussed by the Committee and later confirmed by the Faculty Council. However, there are no examples provided of any kind of improvement in the study programme of *Transport Engineering* made according to those surveys in the SER. During the interviews, the review team was informed that there were no changes implemented in the programme yet, as the Study Programme Committee is waiting for the first graduates to get the whole picture.

The expert team thinks that the study programme need a better map of industry requirements, especially because there exists an excellent relationship with social partners who are willing to participate in the evaluation and improvement processes.

The number of Faculty's social partners is growing slowly. Good contacts are established with mainly local well-known companies. The institution is advised to pay more attention to some other, maybe more agricultural oriented enterprises in transport sector as well, not only in the region of Kaunas.

The QA system presented in the SER and evaluated on site is functional at some basic level. However, it needs to be further developed to establish a closed loop, from proper dissemination of acquired information among all stakeholders, to strategic planning, and finally to an action plan of how to make the improvements, which effectiveness and efficiency needs to be constantly monitored.

2.7. Examples of excellence *

The institution has established an excellent relationships with social partners at all levels, including renovation of some faculties' premises and provision of equipment. The review team believes this represents an example of good practice how active involvement of the social partners can improve the study process and make it also more labour market oriented.

III. RECOMMENDATIONS

1. The association between assessment methods and learning outcomes needs to be continuously monitored and reviewed. Learning outcomes of the programme should be more focused and reduced to a reasonable set of outcomes that can be assessed.
2. The focus of the programme must be revised to make it more compatible with it's name and anticipated qualification. As it is structured now, it looks like mechanical engineering with specialisation in agricultural machinery. The review team acknowledges the need to share modules, but consider more emphasis could be given to transport studies earlier in the programme.
3. There is a need to increase studies on diagnostics, logistics and legal aspects of transport and logistics.
4. The institution should consider creating conditions for students and teaching staff to develop better foreign language skills, and in this way encourage them for international mobility.
5. More research identity should be given to the programme by creating clusters of staff / researchers focusing on research and innovation.
6. The possibility of applying for EU structural funds for further development of the teaching, learning and research equipment should be explored.
7. The students of Transport Engineering programme should be involved in completing projects or tasks at the working farm if there is one adjacent to the campus.
8. The faculty should be more proactive in planning the placement, from the objectives and associated tasks, eligibility criteria, performance criteria, the monitoring process, the role of the institutions and supervisors, assessment process, and the reporting requirement to more precise definition of the expected learning outcomes.
9. The university could better implement the quality assurance tools they have, by closing the loops and better disseminate the results of these processes among all stakeholders.

IV. SUMMARY

The Bachelor study programme *Transport Engineering* was initially accredited in 2012 for three years and has no graduates yet. The curriculum being evaluated fulfils all legal requirements. The objectives and learning outcomes are generally well defined, yet the anticipated learning outcomes should be more focused and reduced to a reasonable set of outcomes that can be assessed.

The major problem of the study programme *Transport Engineering* in its present form is the lack of compatibility between the name of the programme, its learning outcomes, content and the qualifications offered. The programme namely gives an impression of being just another ordinary mechanical engineering study programme with specialisation in agricultural machinery. In this context, more emphasis should be given to (agricultural) transport studies earlier in the programme and in general, including more studies on diagnostics, logistics and legal aspects of the transport and logistics.

The institution could also be more proactive in planning the internships in order to assure achievement of the expected learning outcomes that also need to be more clearly defined. It should also be considered how to create conditions for students and teaching staff to develop better foreign language skills, and in this way encourage them for international mobility. In general, the students are satisfied and very supportive. It can also be said for the teaching staff, which is satisfied with the self-development support at the management level, as well as for the social partners.

The institution has established excellent relationships with social partners also including provision of equipment, which we are pointing out as an example of excellence. On the other hand, there is a lack of research strategy that would aim in creating clusters of staff / researchers focusing on research and innovation that will give more profound research identity to the programme, and at the same time create more opportunities for the students to participate in research activities.

In general, the facilities are excellent, well maintained, well presented and relevant for the type and level of the programme being evaluated. The institution is advised to explore the possibility of applying for EU structural funds for further development of the teaching, learning and research equipment. The quality assurance system is functional at the basic level and needs further improvements by better implementation of the quality assurance tools at disposal in order to close the loops, and by better dissemination of the quality assurance processes among all stakeholders.

V. GENERAL ASSESSMENT

The study programme *Transport engineering* (state code – 612E20003) at Aleksandras Stulginskis university is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation of an area in points*
1.	Programme aims and learning outcomes	2
2.	Curriculum design	3
3.	Teaching staff	3
4.	Facilities and learning resources	4
5.	Study process and students' performance assessment	3
6.	Programme management	3
	Total:	**18**

*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.

Grupės vadovas:
Team leader: Clive Neal Sturgess

Grupės nariai:
Team members: Jochim Haldor

Ger Reilly

Bojan Dolšak

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Monika Simaškaitė

<...>

IV. SANTRAUKA

Bakalauro studijų programa *Transporto inžinerija* pirmą kartą buvo akredituota 2012 m. trejiems metams ir absolventų dar neturi. Studijų turinys atitinka visus teisės aktų reikalavimus. Tikslai ir numatomi studijų rezultatai iš esmės yra apibrėžti, tačiau jie turėtų būti tikslingesni ir sumažinti iki tokio skaičiaus, kurį būtų galima įvertinti.

Pagrindinė šios studijų programos *Transporto inžinerija* problema yra ta, kad programos pavadinimas, numatomi studijų rezultatai, programos turinys ir suteikiama kvalifikacija nedera tarpusavyje. Susidaro įspūdis, kad tai dar viena įprastinė mechanikos inžinerijos studijų programa su žemės ūkio mašinų specializacija. Šiomis aplinkybėmis reikėtų daugiau dėmesio ankstesniame studijų etape skirti (žemės ūkio) transporto studijoms ir apskritai didinti diagnostikos, logistikos ir transporto bei logistikos teisinių aspektų studijoms skirtų valandų skaičių.

Be to, universitetas turėtų intensyviau planuoti praktiką, kad užtikrintų, jog bus pasiekti numatomi studijų rezultatai, kuriuos, beje, reikia aiškiau apibrėžti. Dar reikėtų apsvarstyti, kaip sudaryti studentams ir dėstytojams geresnes sąlygas užsienio kalbų įgūdžiams ugdyti ir tuo tikslu paskatinti tarptautinį judumą. Apskritai studentai yra patenkinti jiems teikiama pagalba. Dėstytojai taip pat yra patenkinti, kad remiama jų tobulinimosi programa vadovybės lygmeniu.

Universitetas palaiko gerus santykius su socialiniais partneriais, kurie, be kita ko, aprūpina įranga – ekspertų nuomone, tai yra gerosios praktikos pavyzdys. Antra vertus, nesukurta mokslinių tyrimų strategija, kurios tikslas būtų sudaryti dėstytojų / tyrėjų grupes (klasterius), orientuotas į mokslinius tyrimus ir inovacijas, taip suteikiant šiai studijų programai aiškesnį mokslinį identitetą ir kartu suteikiant daugiau galimybių studentams dalyvauti mokslinių tyrimų veikloje.

Apskritai materialieji ištekliai yra puikūs, gerai prižiūrimi, pateikiami ir atitinka vertinamos programos studijų rūšį bei pakopą. Universitetui patariama ištirti galimybę gauti struktūrinių fondų paramą tolesniam studijoms ir tyrimams skirtos įrangos tobulinimui. Kokybės užtikrinimo sistema veikia pagrindiniu lygiu ir turi būti toliau tobulinama veiksmingiau įgyvendinant esamas kokybės užtikrinimo priemones siekiant sukurti uždarą ciklą ir geriau viešinti socialiniams dalininkams kokybės užtikrinimo procedūras.

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III. REKOMENDACIJOS

1. Reikia nuolat stebėti ir tikrinti ryšį tarp vertinimo metodų ir studijų rezultatų. Programos studijų rezultatai turėtų būti tikslingesni ir sumažinti iki tokio skaičiaus, kurį būtų galima įvertinti.
2. Būtina persvarstyti studijų programos kryptį, kad programa labiau atitiktų savo pavadinimą ir numatytą suteikti kvalifikaciją. Kadangi programos struktūra jau nustatyta, panašu, kad tai yra mechanikos inžinerija su žemės ūkio mašinų specializacija. Vertinimo grupė pripažįsta būtinybę taikyti tuos pačius modulius, bet mano, kad daugiau dėmesio transporto studijoms galėtų būti skiriama anksčiau šioje programoje.
3. Reikia didinti diagnostikos, logistikos ir transporto bei logistikos teisinių aspektų studijoms skirtų valandų skaičių.

4. Universitetas turėtų apsvarstyti galimybę sudaryti studentams ir dėstytojams sąlygas tobulinti užsienio kalbų įgūdžius ir tuo tikslu skatinti jų tarptautinį judumą.
5. Reikėtų stiprinti šios programos mokslinių tyrimų aspektą dėstytojų ir (arba) tyrėjų grupes, orientuotas į mokslinius tyrimus bei inovacijas.
6. Reikėtų ištirti galimybę gauti ES struktūrinių fondų lėšų tolesniam studijoms bei moksliniams tyrimams skirtos įrangos tobulinimui.
7. Studijų programos *Transporto inžinerija* studentai turėtų vykdyti projektus arba darbus ūkyje, jei toks ūkis yra netoli universiteto.
8. Fakultetas turėtų iniciatyviau planuoti praktiką – pradedant tikslų ir susijusių uždavinių, tinkamumo kriterijų, atitikties kriterijų, monitoringo procedūros, institucijų ir vadovų vaidmens, vertinimo procedūros ir reikalavimo atsiskaityti nustatymu ir baigiant tikslesniu numatomų studijų rezultatų apibrėžimu.
9. Universitetas galėtų geriau įgyvendinti turimas kokybės užtikrinimo priemones uždarydami ciklą (*tekste „sukurti uždarą ciklą“)* ir geriau pranešdami visiems socialiniams dalininkams apie šių procedūrų rezultatus.

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