



CENTER FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

EVALUATION REPORT
STUDY FIELD
TRANSPORT ENGINEERING
at ŠIAULIAI STATE COLLEGE

Expert panel:

1. Prof. Dr.-Ing. Haldor E. Jochim, *(panel chairperson), academic,*
2. Prof., Dr.Sc.Eng. Irina Jackiva (Yatskiv), *academic,*
3. Prof. Dr. Artūras Keršys, *academic,*
4. Mr Edmund Lisovski, *representative of social partners',*
5. Mr Gytautas Urbonas, *students' representative.*

Evaluation coordinator -

Ms Ona Charževskytė-

Report language – English

© Centre for Quality Assessment in Higher Education

Study Field Data

Title of the study programme	Automobile Technical Exploitation	Transport Logistics Technologies
State code	6531EX048	6531EX051
Type of studies	Higher education college studies	Higher education college studies
Cycle of studies	First	First
Mode of study and duration (in years)	Full-time studies (3 years) Part-time studies (4 years)	Full-time studies (3 years) Part-time studies (4 years)
Credit volume	180	180
Qualification degree and (or) professional qualification	Professional Bachelor of Engineering Sciences	Professional Bachelor of Engineering Sciences
Language of instruction	Lithuanian	Lithuanian
Minimum education required	Secondary	Secondary
Registration date of the study programme	30 August 2002	21 December 2004

CONTENTS

I.	INTRODUCTION	4
1.1.	BACKGROUND OF THE EVALUATION PROCESS	4
1.2.	THE REVIEW TEAM	4
1.3.	GENERAL INFORMATION	4
1.4.	BACKGROUND OF STUDY FIELD/STUDY FIELD PLACE AND SIGNIFICANCE IN HEI	5
II.	GENERAL ASSESSMENT	7
II.	STUDY FIELD ANALYSIS	8
3.1.	STUDY AIMS, OUTCOMES AND CONTENT	8
3.2.	LINKS BETWEEN SCIENCE (ART) AND STUDY ACTIVITIES	15
3.3.	STUDENT ADMISSION AND SUPPORT	17
3.4.	STUDYING, STUDENT PERFORMANCE AND GRADUATE EMPLOYMENT	20
3.5.	TEACHING STAFF	25
3.6.	LEARNING FACILITIES AND RESOURCES	28
3.7.	STUDY QUALITY MANAGEMENT AND PUBLICITY	29
IV.	RECOMMENDATIONS	32
V.	SUMMARY	34

I. INTRODUCTION

1.1. BACKGROUND OF THE EVALUATION PROCESS

The evaluation of study fields is based on the Methodology of External Evaluation of Study Fields approved by the Director of Centre for Quality Assessment in Higher Education (hereafter – SKVC) 31 December 2019 Order [No.V-149](#).

The evaluation is intended to help higher education institutions to constantly improve their study process 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 field SKVC takes a decision to accredit study field either for 7 years or for 3 years. If the field evaluation is negative such study field is not accredited.

The study field and cycle is **accredited for 7 years** if all evaluation areas are evaluated as “exceptional” (5 points), “very good” (4 points) or “good” (3 points).

The study field and cycle is **accredited for 3 years** if one of the evaluation areas was evaluated as “satisfactory” (2 points).

The study field and cycle is **not accredited** if at least one of evaluation areas was evaluated as “unsatisfactory” (1 point).

1.2. THE REVIEW TEAM

The review team was completed according to the Experts Selection Procedure (hereinafter referred to as the Procedure) approved by the Director of Centre for Quality Assessment in Higher Education on 31 December 2019 [Order No. V-149](#). The Review Visit to HEI was conducted by the team on 18/12/2020.

Prof. Dr.-Ing. Haldor E. Jochim, (panel chairperson)

Prof. Dr.Sc.Eng. Irina Jackiva (Yatskiv), *academic*,

Prof. Dr. Artūras Keršys, *academic*,

Mr Edmund Lisovski, *representative of social partners’*

Mr Gytautas Urbonas, *students’ representative*.

1.3. GENERAL INFORMATION

The 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.	<i>Descriptions of study subjects Freight Transportation, Automobile Maintenance and Railways</i>
2.	

1.4. BACKGROUND OF STUDY FIELD/STUDY FIELD PLACE AND SIGNIFICANCE IN HEI

General information about the significance of the study field:

Automobile Transport Engineering and Logistics are important engineering fields, for various reasons.

1. Motor-cars (automobiles) have been a vital means of individual transport for many decades. Private car ownership is high with a tendency to increase further with rising income. Thus the engineering of motor-cars has become a major branch of mechanical engineering.

2. On a national and regional level, the technical service and repair of motor-cars has been gaining importance due to the rising number of cars. Well-trained specialists in this field are in great demand.

3. Taking into account the challenges by climate change it is obvious that the technology of motor cars must change in due course. Apart from becoming more efficient, the technology will have to move towards alternative means of energy fast. That change requires a huge amount of new thinking, resources and equipment in teaching and research.

4. Lithuania is the main transit country in the Baltics. The share of transport-related business is higher than the international average in this country. That is especially the case in goods traffic, thus leading to special attention to this part of automotive engineering when analysing study programmes and research.

5. The field of logistics is also of special importance in Lithuania, due to the importance of the goods traffic in transit through the country. If the country wants to add value to its service of transporting goods across its roads, railways and waterways, logistics experts are a necessity.

Information about the role of the HEI (reference: SER p. 4):

Šiauliai State College is a state higher education institution, acting as a public institution carrying out first cycle college studies. The College was established in 2002 with the reorganisation of higher technical and medical schools.

The College has the Faculty of Health Care (3 departments), Faculty of Business and Technologies (5 departments), Non-formal Education and the Centre for Fostering Entrepreneurship and Leadership. 22.2 per cent (319 students) of all College students consist of students from the Engineering Sciences fields group students, the majority of whom (49.8 percent) study in the Transport Engineering field. They become specialists in the fields of freight and passenger transport, automobile repair and technical maintenance.

The main unit of study and science in the field of transport engineering is the Transport Engineering Department. The number of students in this area is 159 in the year 2020 (82 in Automotive Engineering, 72 in Transport Logistics). The admission to the Transport Logistic programme was suspended in the year 2020 due to insecurity about future enrolments, but will be subject to this evaluation.

II. GENERAL ASSESSMENT

The *Transport Engineering* study field and **first cycle** at Šiauliai State College is given **positive** evaluation.

Study field and cycle assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation of an area in points*
1.	Study aims, outcomes and content	4
2.	Links between science (art) and study activities	3
3.	Student admission and support	4
4.	Studying, student performance and graduate employment	4
5.	Teaching staff	4
6.	Learning facilities and resources	4
7.	Study quality management and publicity	4
	Total:	27

*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 evaluated very well in the national and international context, without any deficiencies;

5 (exceptional) - the field is exceptionally good in the national and international context/environment.

II. STUDY FIELD ANALYSIS

3.1. STUDY AIMS, OUTCOMES AND CONTENT

Study aims, outcomes and content shall be assessed in accordance with the following indicators:

3.1.1. Evaluation of the conformity of the aims and outcomes of the field and cycle study programmes to the needs of the society and/or the labour market (not applicable to HEIs operating in exile conditions)

(1) Factual situation

Information from SER (p. 5-6):

The faculty provides a detailed overview of the aims and outcomes of both programmes in the self-evaluation report. They report about objectives and intended learning outcomes being formulated by the programmes' implementers and social stakeholders such as employers, students and graduates. The programmes' aims and learning outcomes are based on the development fields defined in the strategic documents. (Lithuania's Progress Strategy "Lithuania 2030"): development of smart economies, meeting the mobility needs of the residents, creating effective integrated public transportation systems, modern infrastructure of appropriate quality, and developing sustainable mobility initiatives.

The learning outcomes are periodically reviewed when updating study programmes in order to respond to changing labour market needs.

The interest of the railways for the programme is obvious through teaching staff from railways visiting and having employed four graduates from the programme for their locomotive depot. The contents relevant to logistics entails rails, wagons, loads, passenger distribution and engine construction.

According to the appraisal of employers, the project work of the students has become much more sophisticated during the past decade.

Information from interviews:

The experts inquired about the faculty making sure that the programme content is in line with the recent developments. The faculty confirmed that one important way is the regular contact to stakeholders, who also invest into the laboratories.

The experts also inquired about the relative importance of road and rail in the logistics programme. The faculty staff explained convincingly that both areas are equally important and that this is reflected in the teaching.

As to the future of the Transport Logistics Technologies programme, the faculty and the employers point out that the high failure rate in the school leavers' maths exam in 2020 has led the college to tread carefully and suspend the programme for this year. The railway restructuring that began three years ago might have contributed to a decline of interest in the programme

But there is agreement that the long-term prospects for logistics experts are good and logistics experts are in demand both in the rail and the road business. The college and the employers, mainly the Lithuanian Railways and the NEXUS truck academy are setting up a preliminary plan for restarting the programme.

(2) Expert judgement/indicator analysis

The study programmes in the study field of Transport Engineering – Automobile Technical Exploitation and Transport Logistics Technologies – correspond to the public and labour market needs. The programmes' aims and learning outcomes are based on the needs of society and development fields defined in the strategic documents. The study programme is designed within the framework of the strategic development of Šiauliai region (regional public transport system, systems for coordination of the passenger road and railway transport routes, development of the infrastructure of logistic centres).

As a result of the monitoring the needs of society and labour market, the organisers of the programme updated the programme content and learning outcomes. One good-practice example is about Multimodal Carriage, a speciality subject integrated into the programme for analysing the issues of multimodal transport. Quality management issues are emphasised in modules such as Automobile Maintenance, Cargo Terminals, Logistics, etc.

Intensive cooperation with JSC Lithuanian Railways is important in developing the study programme Transport Logistics Technologies, taking into account both global trends and strategy in the field of freight transportation, as well as the needs of the company.

The existing coherence between the programme content and qualification awarded enables the graduates to work in the transport sector. Having gained the vocational Bachelor's qualification degree in Engineering Sciences, they are employed at different companies on the transport market. They are able to perform automobile maintenance, diagnostics and repair by selecting the appropriate innovative technological and organisational measures. Those graduates who have gained the abilities to develop carriage technologies and organise passenger and cargo transport are employed at the freight carrier companies.

Graduates of both study programmes have the possibility to seek higher university education by studying at universities – the teachers provide consultations and support the students in appropriate preparation for the Master degree studies, at the students' request.

Considering the specificity of the graduates' competences complying with the Automobile Technical Exploitation and Transport Logistics Technologies and labour market needs and the facilities and human resources available, the number of study programmes executed in the study field of Transport Engineering is considered adequate.

Especially the great engagement of the employers in contributing to the programmes, both the automotive programme and the temporarily suspended admission to the Transport logistics technologies programme, is worth mentioning and points to a good network of contacts resulting in good perspectives for future development.

3.1.2. Evaluation of the conformity of the field and cycle study programme aims and outcomes with the mission, objectives of activities and strategy of the HEI.

(1) Factual situation

Information from SER (p. 5):

The self-evaluation report states that ‘the aim of [the] ATE study programme is to prepare qualified specialists capable of selecting innovative technological and organizational aids and ensuring quality and responsibility of professional performance results’ (table on p. 5).

(2) Expert judgement/indicator analysis

The aims of the Transport Engineering study field and programmes to prepare qualified specialists capable of performing technical automobile maintenance, diagnostics and repair, selecting innovative technological and organisational technologies and ensuring quality and responsibility of professional performance are in line with the mission, objectives of activities and strategy of the HEI. The college also fulfils its mission to educate qualified specialists capable of designing, organising and controlling the technological processes of transport logistics.

In view of the HEI mission and activity strategy to prepare qualified specialists, conduct re-qualification, continuous training, educate the society open to education, culture, knowledge, and develop a creative, educated, dignified, morally responsible, civic, independent, and entrepreneurial personality, the programmes are implemented in a flexible manner, responding to labour market changes and making respective decisions on the programme content and intended learning outcomes.

The wording of the aim in the SER, however, does not always reflect the link with transport engineering. For instance, Technical Mechanics usually includes the foundations of construction, which is not directly related to transport. More specificity would be useful in this respect.

3.1.3. Evaluation of the compliance of the field and cycle study programme with legal requirements

(1) Factual situation

Information from SER (p. 8):

The total volume of the programmes is 180 credits (minimum 180 required), 159 credits (minimum 120 credits required) have been allocated to achieving the learning outcomes in the study field (including practice placement and final thesis preparation), 30 credits in total (minimum 30 credits required) have been allocated to the practice placements. The study programmes are completed by assessment of the graduates’ competencies during the final thesis (project) defence allocated with 12 credits (minimum 9 credits required). The free electives available under the study programmes for the students comprise 9 credits. The volume of the general college study subjects is 21 credits.

The annual volumes of the studies under the full-time and part-time study modes providing the equivalent degree are, respectively, 60 credits (minimum 45 credits required) and 45 credits (maximum 45 permitted) per year. The learning outcomes, study of volume in credits and contact work volume provided for under the programmes are the same for the both study modes. The volume of students’ contact work (including remote work) is 2380/2373 academic hours, i.e. 49 % (at least 20 % required), students’ independent work volume – 2420/2427 academic hours, i.e. 51 % (at least 30 % required). Practice placement and other practical preparation as described in the General Regulations on Execution of the Studies is allocated 1846 academic hours.

(2) Expert judgement/indicator analysis

The curriculum designs of the study programmes in the Transport Engineering field – Automobile Technical Exploitation and Transport Logistics Technologies (full-time (3 years) and part-time (4 years) study modes) - are in line with the General Requirements on Execution of the Studies. The annual volumes of the studies under the full-time and part-time study modes providing the equivalent degree are equal to or higher than required.

The condition related to practice placement and other practical preparation as described in the General Regulations on Execution of the Studies is satisfied in the programmes. More than the third of the programme volume, have been allocated to this.

The number of contact work hours under the full-time and part-time studies differs. In case of part-time studies, part of the lectures and practical / laboratory work are conducted in the form of consultations. In order to ensure the accessibility of learning outcomes, alternatives of the applied studies and relevant assessment methods must be defined in the study module programmes.

The aims and intended learning outcomes of both study programmes of the Transport Engineering field, which conform to the description of the group of engineering study fields and requirements to the first-cycle college studies, are identical in two groups of abilities (to gain knowledge and abilities and possess personal and social skills). The differing learning outcomes defined in other groups, on the other hand, reveal the unique character of the programmes and enable the fulfilment of the study programme aims. The learning outcomes of Automobile Technical Exploitation are oriented towards automobile maintenance, diagnostic and repair, and Transport Logistics Technologies is oriented towards passenger and cargo carriage, management of warehousing and handling operations.

The level of complexity of the learning outcomes conforms to the level 6 qualification requirements under the European and Lithuanian Qualifications Framework for higher education. The studies are focused on preparation for professional occupation in the field of transport, enabling the acquisition of R&D-based qualification.

By ensuring the close link between the theoretical materials delivered under the subjects and practical classes as well as applying flexible (including remote) teaching and learning methods and techniques, the subjects studied play an important role in the achievement of the programmes' aims and successful implementation of the learning outcomes. The content and description of the study subjects are in line with the requirements applicable to the college and first-cycle studies, and the programme volume is sufficient in view of the expected learning outcomes.

3.1.4. Evaluation of compatibility of aims, learning outcomes, teaching/learning and assessment methods of the field and cycle study programmes.

(1) Factual situation

The appropriate link between the study programme outcomes and subject learning outcomes has been reflected in the self-assessment report, while the conformity of the teaching, learning and assessment methods with the learning outcomes has been described in greater detail during

the discussions with experts, upon submission of additional materials for assessment, namely, the descriptions of study subjects Freight Transportation, Automobile Maintenance and Railways.

Information from interviews:

The additional information submitted and discussions with the teachers have shown that systemic approach and process providing relevant links between the learning outcomes, teaching/learning, and assessment methods (diversity and appropriateness) prevail in development, attestation and updating of the study subjects and programmes. In response to the question of whether the students' knowledge and skill assessment was performed on the basis of pre-established criteria familiar to the students (i.e. the pre-established set of criteria) asked during the meetings with the experts, the teachers, students, and authors of the self-assessment report named the assessment system and/or study outcome achievement/assessment criteria applied in the models and also provided in the descriptions of the above study subjects.

For instance, the experts asked how the link between the expected learning outcomes, teaching, learning and assessment methods is provided in practice. The SER authors and the teachers confirm that students get acquainted with it by teachers from the start.

(2) Expert judgement/indicator analysis

To ensure unbiased and fair assessment of the students, it would be reasonable to formulate and present the assessment criteria reflecting the evidence used by the teacher in assessment of the knowledge and skills acquired by the student (by identifying their weight, i.e. effect on the assessment mark) in the assessment forms provided for the study modules. For example, where "laboratory work report, defence" is indicated as the assessment form/method of the module, the assessment criteria could be: preparation for implementation of the work, analysis of the results generated and comparison to the theoretical material, validity and presentation of the results, formulation and validity of the conclusions.

3.1.5. Evaluation of the totality of the field and cycle study programme subjects/modules, which ensures consistent development of competences of students.

(1) Factual situation

Information from SER (p. 10):

According to the SER, the subjects are arranged in such a way that the process of achieving learning outcomes leads from the general knowledge towards the solution of engineering tasks, engineering analysis, applied research and design. The SER cites several examples for this principle.

After acquiring theoretical knowledge and abilities, students are supposed to consolidate these by carrying out training and professional practices.

(2) Expert judgement/indicator analysis

The subjects and modules are positioned in the programmes consistently, their subjects and content/topics do not overlap. The analysis of the logical relations and sequencing of the study

subjects has shown coherent positioning of the study subjects by semesters. The subjects which provide fundamental knowledge, understanding and abilities forming the foundation for further studies and research are delivered in the first semesters. The modules delivered during subsequent semesters build on the knowledge and abilities gained during the previous modules. This enables the students to successfully achieve the learning outcomes, providing the conditions for application of the verified science knowledge into practice, for implementing projects and addressing the issues emerging in transport engineering. The logical relations and sequencing of the part-time study subjects are similar to the full-time studies, but spread throughout the four-year period (8 semesters).

3.1.6. Evaluation of opportunities for students to personalise the structure of field study programmes according to their personal learning objectives and intended learning outcomes.

(1) *Factual situation*

Information from SER (p. 10):

Students of the programmes in the Transport Engineering field have the opportunity to personalise the studies by selecting alternative or free elective subjects. The students of programmes Automobile Technical Exploitation and Transport Logistics Technologies (total volume: 21 credits) are offered alternatives in the areas of Social Sciences and Humanities and development of digital competences (Digital/Information Technologies, Sociology, Psychology, Professional and Foreign Language). In the second and third years, three 15-credit special study subjects for knowledge deepening in the field are elected freely in line with the personal learning objectives and intended learning outcomes from the list of 6 free elective subjects offered. During the study process, the students have the possibility to choose three free electives, 3 credits each, which provide the conditions for them to gain knowledge in their area of interest or professional activity.

(2) *Expert judgement/indicator analysis*

Students' opportunities of personalisation and selecting individual specialities are extensive compared with similar study programmes at other colleges. They are placed in several semesters, allowing for the piecemeal personal development of students, and cover various areas inside and outside of the subject field. The experts regard this concept as fully adequate.

3.1.7. Evaluation of compliance of final theses with the field and cycle requirements

(1) *Factual situation*

Information from SER (p. 10-11):

The topics and content of the final theses complying with the Transport Engineering field are related to automobile service company design and modernisation, design and modernisation of automobile repair technologies, demonstration benches for automobile structures, vehicle design, freight carriage process development, analysis and improvement of the development possibilities, analysis and optimisation of the passenger transportation routes, analysis of

vehicles at the freight carrier companies, analysis and optimisation of the logistic processes at terminals and warehouses.

In preparation of the final theses, the students select the design methodologies and apply them to design of the technological processes, employ analytical and modelling methods, solve the qualitative and quantitative engineering tasks in the field of Transport Engineering, and conduct applied research.

(2) Expert judgement/indicator analysis

The assessment of the information related to the final project topics provided in the self-assessment report and Annex 2 suggested that only a small share of the topics of the final theses are related to the field of freight transportation by railway. Commissioning of the topics relevant to the sector should be sought by cooperating with one of the largest transport companies in the Baltic region.

The strategy of the organisers of the study programmes to engage social partners in the process of preparation of the final theses is assessed positively. Considerable share of the final theses under the study programmes are related to specific automobile maintenance and repair companies and issues relevant to transport and logistic companies. The final thesis "Demonstration Bench for the Dual-Range Engine for the Automobile with Automatic Transmission" commissioned by social partner Automokykla Ltd. could be mentioned as a best-practice example.

Nevertheless, for the purpose of diversity of the final theses topics and closer relation to the engineering activity, it is important to pursue more intensive cooperation with social partners.

Recommendations for this evaluation area:

- 1. The number of contact work hours under the full-time and part-time studies differs. In case of part-time studies, part of the lectures and practical / laboratory work are conducted in the form of consultations. In order to ensure the accessibility of learning outcomes, alternatives of the applied studies and relevant assessment methods must be defined in the study module programmes.*
- 2. To assure unbiased and fair assessment of the students, it would be reasonable to present the assessment criteria reflecting the evidence used by the teacher in assessment of the knowledge and skills acquired by the student (by identifying their weight, i.e. effect on the assessment mark) in the assessment forms provided for the study modules.*
- 3. Only a small share of the topics of the final theses are related to the field of freight transportation by railway. Commissioning of the topics relevant to the sector should be sought by cooperating with one of the largest transport companies in the Baltic region.*
- 4. For the purpose of diversity of the final project topics and their closer relation to the engineering activity, it is important to seek more intensive cooperation with the social partners, who might propose ideas for the projects or commission projects relevant for company operations.*

3.2. LINKS BETWEEN SCIENCE (ART) AND STUDY ACTIVITIES

Links between science (art) and study activities shall be assessed in accordance with the following indicators:

3.2.1. *Evaluation of the sufficiency of the science (applied science, art) activities implemented by the HEI for the field of research (art) related to the field of study.*

(1) Factual situation

Information from SER (p. 12-13):

During 2017–2019 the teachers of the study field implemented 17 projects, of which 7 are directly related to the field studies.

During the self-assessment period the study field teachers implemented 16 third-party financed applied research projects, students participated in 8 of them.

Examples of applied research with business partners.

- 1) Development of autonomous buses for Šiauliai in cooperation with TU Brandenburg and other partners, currently on hold due to pandemic;*
- 2) Analysis of safety at crossings for driving schools;*
- 3) Construction of visual support for driving schools.*

There is cooperation with universities/colleges in Tallinn, Vilnius and Kaunas.

The faculty is a member of the national Association of Transport Teaching Staff.

The necessary resources for research are provided by collaboration with partners.

The system of motivation for scientific activity entails a specific number of publications being required for an internal 'accreditation' and the payment of expenses for all sorts of research-correlated meetings and travel. Another element are prizes for research achievements.

(2) Expert judgement/indicator analysis

The difference between practical work and practical research appears to be blurred (see also 3.2.3). The distinction should be clearer; this would help to sharpen the research profile.

3.2.2. *Evaluation of the link between the content of studies and the latest developments in science, art and technology.*

(1) Factual situation

Information from SER (p. 13-14)

According to the SER, the teachers include their constantly updated newest technology and scientific knowledge in the implemented study subjects while attesting subjects at least every 3 years. The content of the material provided to students is adjusted, while meeting the outcomes laid down in the subject description and the subject content topics.

For example, technological advances were taken into account when updating the subject descriptions of the ATE programme. The speciality subjects introduced the following innovations: New Materials Creation Trends (nanostructured, fibrous structures, shape-memory, ecological materials); laser

cutting, water jet cutting; development and construction of electric cars; hybrid cars; maintenance of electric cars and hybrid cars; manufacturing of parts with 3D printers, etc.

Environmental and ecological topics are dealt with in following subjects: Automobile Diagnostics, Automobile Repair Technology, Automobile Service Companies Technology Practice, Graduation Practice, Environmental Protection, Safe Operation of Automobiles, Engine Management Systems.

When updating the TLT programme the following topics were included in the mandatory subject Smart Transport Systems: Delivery with remotely piloted drones, Self-driving vehicles, Mobile tracking apps, Cloud computing, Internet of Things, Technologies for business process management and (KPI) Management among cooperating transport companies.

Scientific achievements and technological innovations in the field of transport engineering are introduced in other speciality subjects too. Examples are automated loading systems; warehousing systems (systematic and chaotic warehousing, warehouse management programmes, smart warehouses); electronic transport services buying – sales platforms, reverse logistics; hybrid transport; passenger transport information networks and apps; multimodal transport in green logistics, etc.

(2) Expert judgement/indicator analysis

The college gives sufficient evidence for their integrating new technological developments into its curriculum.

3.2.3. Evaluation of conditions for students to get involved in scientific (applied science, art) activities consistent with their study cycle.

(1) Factual situation

Information from SER (p. 14):

According to the SER, 'in 2017, 9.5 % of the field study programmes students participated in conferences; in 2018 the number of participants decreased to 3 percent. In 2019, 3 percent of the students of the field study programme publicised the research results at the international student scientific and practical conference "Business, New Technologies and Smart Society", and in 2020 – 4 percent.'

Information from interviews:

The college members point out that their laboratories are not certified for research, since the labour market is in the focus of the college. One research example of 5 years ago was mentioned (investigation of common-rail injectors).

The students point out that they have practical engineering lessons, do all sorts of calculations, practical tasks, study papers and practical modernisation of technology.

It appears that the numbers of students who participated decreased during the previous 3 years.

(2) Expert judgement/indicator analysis

The difference between practical work and practical research appears to be blurred. Taking into account the main job of a college, the experts believe that what the college does in its fields has been adequate. However, the participation rate of students should be raised.

Recommendations for this evaluation area:

The participation rate of students in scientific conferences should be raised with the aim of clarifying the distinction between practical work and practical research, thus supporting an improvement of the latter.

3.3. STUDENT ADMISSION AND SUPPORT

Student admission and support shall be evaluated according to the following indicators:

3.3.1. Evaluation of the suitability and publicity of student selection and admission criteria and process.

(1) Factual situation

Information from SER (p. 15-18):

The number of students admitted is constantly decreasing. The Ministry of Education raised admission requirements for Lithuanian higher education institutions in 2019. Low intake because 40% of school leavers did not meet the admission requirements due to poor mathematical exams in 2020; therefore, the college decided to suspend the admission to the Transport Logistics Technologies programme.

The college tries to attract and activate social stakeholders. They try to attract students from vocational training and through collaboration with high schools. It enables part-time study with flexible timetables. The 200 EUR/m sponsorship by the government for students in regional colleges might help with this in future.

Information from interviews:

The reasons why students have chosen the college are diverse; among others, the state scholarship for study at regional colleges, the opportunity to study in part-time study and the logistics course combining management and engineering are given as motivations by the students interviewed.

(2) Expert judgement/indicator analysis

The decrease of student numbers is mainly due to external causes. The experts therefore welcome the strategy of the college to involve external stakeholders to gain students. They would also welcome if the college were to resume the Transport Logistics Technologies programme.

3.3.2. Evaluation of the procedure of recognition of foreign qualifications, partial studies and prior non-formal and informal learning and its application.

(1) Factual situation

Information from SER (p. 18):

The College recognises competences acquired in the non-formal adult education system or through informal education if there is evidence in the form of learning outcomes. Acquired competences are credited without limitation if competences correspond essentially to the learning outcomes of a

similar subject in the Study Programme or if at least 50 percent of the corresponding study subject hours of the study Programme were allocated to the acquisition of competences. The College counts competences acquired in various environments: work, activities of various organisations, volunteering, community work, studying in institutions of non-formal education, or even self-education, provided the applicant can substantiate and prove their individual competences are equivalent to the learning outcomes of the subjects of the college. During the period analysed two students were given credits for 19 subjects (102 credits) overall.

The recognition of competences acquired through formal education is carried out on the basis of reconciled and non-reconciled content of professional education and study. The process is applicable to people who have acquired (or received recognition) a qualification of at least level IV in accordance with the Description of the Lithuanian Qualifications Framework and who have been admitted to College studies of the first cycle. 215 ATE Programme subjects and 289 TLT Programme subjects were credited in this way during the analysed period. A total of 2226 credits were credited.

(2) Expert judgement/indicator analysis

The College presented a very detailed prescription of its procedure of recognition of external qualifications in the SER and also laid open the number of credits recognised. The requirements for accreditation are fully met.

3.3.3. Evaluation of conditions for ensuring academic mobility of students.

(1) Factual situation

Information from SER (p. 19-20):

In accordance with the procedure set out in Description of the Procedure of Selection of the College Students, Teachers and Administrative Staff to Participate in the Erasmus Exchange Programme (2016), the International Relations and Project Management Department runs an Erasmus+ selection contest for students twice a year. Information on opportunities to participate in mobility programmes is published on the College's website, in open College spaces, stands, social networks, students are informed about the possibility to participate in the competition in person via e-mail. All outgoing/incoming students attend psychological and intercultural communication lectures and have a coordinator both in the College and in a foreign organisation throughout their mobility. Outgoing students are given an opportunity to communicate with College students who had already been abroad. Based on the 2017 College graduates' survey, 80 % of respondents consider the conditions for travelling abroad under exchange programmes as excellent.

The number of outgoing students for partial studies under the Erasmus+ exchange programme lies between 1 and 7 in the years 2017-2019.

Information from interviews:

Asked why the numbers of students studying abroad are relatively low despite all the efforts of the college, the interviewees from staff argued that students tend not to study abroad due to family and jobs; the students confirmed this.

(2) Expert judgement/indicator analysis

The college attempts to support students in their academic mobility in an adequate way. The relatively weak participation is mainly due to external factors the college cannot influence.

3.3.4. Assessment of the suitability, adequacy and effectiveness of the academic, financial, social, psychological and personal support provided to the students of the field.

(1) Factual situation

Information from SER (p. 22-23):

The Quality Manual's Student Support Management (2020) procedure describes the implementation and administration of student support.

Academic support consists of the following elements: information about programmes, flexible study schedule, individual study schedules, counselling by teachers and administration on study and career issues. If required, teachers can initiate academic support for first year students by offering additional mathematics, physics, chemistry and other courses.

Additionally, incentive scholarships are awarded for the last semester performance results. One-off scholarships are awarded to those who have achieved the best learning outcomes and are distinguished in scientific, cultural, sporting, social activities or in the event of a student's accident. Social and study scholarships are awarded by the State Studies Foundation. Study scholarships are awarded to students who enter study places with the highest scores. Students are also eligible for nominal scholarships by national and municipal governments. On average, 25 percent of students receive scholarships each year.

Students can also receive state-subsidised loans. During the period of self-assessment, 6 students received state-subsidised loans to reimburse the cost of their studies; 2 students applied for a loan to cover the cost of living.

Two students applied for financial support by the Department for the Affairs of Disabled at the Ministry of Social Security and Labour.

Accommodation services for students are offered in two newly renovated and modernised dormitories with 393 places. Priority is given to orphans, foster children and disabled students (including students with a disabled parent). The demand for dormitories for students is fully met. During the analysed period, the number of students living in the dormitory ranged from 14 to 33.

A project won by the Lithuanian Student Union, funded by the State Fund for the Improvement of Public Health, made it possible to employ a psychologist in the College, who supports students on personal issues and on issues related to studies, such as time planning, effective learning, lack of motivation, or public speaking. Consultations are free of charge and information about them is published on the College's website and on Facebook page and invitations are made to confidential psychological consultations.

Students have the opportunity to express themselves in various artistic, cultural, sporting and scientific activities. Students take part in concerts, student and teacher works exhibitions, have excellent conditions for training and successfully compete in various sports competitions. For the personal development of students, the College offers lectures on a wide range of topics and invites students to attend seminars and training on entrepreneurship and creativity.

(2) Expert judgement/indicator analysis

The college offers a great variety of support. The offer of psychological support is a particularly valuable achievement. The experts' experience has shown that this kind of support can prevent students from giving up their studies or give them new perspectives if they remain with their decision to do so.

3.3.5 Evaluation of the sufficiency of study information and student counselling.

(1) Factual situation

Information from SER (p. 24):

Information about the studies is provided by the Department, teachers, administrative staff, and the Deanery. Group curators introduce first year students into the study system and support options. Introductory days are organised for first-year students. Students are provided with information about scholarships. Once a month, information and consultation meetings are held with curators, where attendance at classes, interim assessments and other relevant study issues are discussed.

Other ways and means to inform students are the College website, information stands and articles in the regional press. There is a timetable for academic counselling published on the College's website. Though oral consultation is the most effective form of consultation, students who are unable to attend the College are consulted remotely via e-mail, telephone or distance learning platforms. At the time of the feedback assessment, around 85 percent of students fully agree with the statement that "I had the opportunity to consult with a teacher".

The College's Student Admission and Career Centre conducts student consultation, provides information on career management issues and organises seminars for students about topics such as preparation for the labour market, lifelong learning, career decision making, opportunities for further studies at Lithuanian and foreign universities.

The Library and Self-study Centre provide personal consultations and training sessions to introduce students to the information stored in the library, the possibilities of searching for this information and newly implemented systems.

(2) Expert judgement/indicator analysis

Student information and student counselling are adequate.

Recommendations for this evaluation area:

3.4. STUDYING, STUDENT PERFORMANCE AND GRADUATE EMPLOYMENT

Studying, student performance and graduate employment shall be evaluated according to the following indicators:

3.4.1. Evaluation of the teaching and learning process that enables to take into account the needs of the students and enable them to achieve the intended learning outcomes.

(1) Factual situation

Information from SER (p. 25-27):

The college offers full-time and part-time study plans. The part-time study plan is spread over a longer period. Individual study plans are also offered. The SER explains in detail how teaching forms are internally regulated and how the teaching has been organised during the pandemic. The stated teaching aims are supplemented by an adequate variety of teaching methods, including problem-

based teaching, individual teaching and practical tasks, which are also explained in detail. Students have the possibility to repeat subjects, re-pass exams, liquidate academic debts, postpone a session, take a break from studies or take academic leave

Information from interviews:

On the face of it, the timetables of full-time vs. part-time programme show different numbers of lessons. This is explained by the fact that the part-time version has a two-week block session with all laboratory work and interim assignments, and Saturdays are used for preparation classes and exams.

The experts inquired how results of part-time students are in comparison with full-time students. According to the teachers, personal abilities are more important, and they do not perceive significant differences between the results of both groups. Part-time students do a greater share of their work independently and get more time for individual counselling, which appears to help them achieve comparable results. The gap between school and college is seen as a bigger problem.

(2) Expert judgement/indicator analysis

The expert panel appreciates that Faculty are oriented to students' needs. During the self-assessment period, 19 students were allowed to study according to an individual study plan. Similar information was shared during the session with students.

The teaching and learning process satisfies students' needs and enables them to achieve the learning outcomes.

3.4.2. Evaluation of conditions ensuring access to study for socially vulnerable groups and students with special needs.

(1) Factual situation

Information from SER (p. 27-28):

According to the SER, students with special needs (such as visual, auditory, mobility impairments etc.), are taught with appropriate methods in the study process, such as increasing the font size, speaking at a slower pace, increasing the assessment time, etc.

Physical resources such as libraries, study tools and IT infrastructure are also adapted to students with special needs. Vulnerable groups and persons with disabilities can be provided with financial assistance. Students can also seek psychological help within the college if they experience emotional difficulties or difficulties in learning.

(2) Expert judgement/indicator analysis

The college offers adequate structures for the requirements of students who are socially vulnerable and those with special needs.

3.4.3. Evaluation of the systematic nature of the monitoring of student study progress and feedback to students to promote self-assessment and subsequent planning of study progress.

(1) Factual situation

Information from SER (p. 28):

The Department and Deanery monitor students' assessments via an electronic exam system, which is also used for continuous monitoring during the semester.

The college provides internal measures to keep up the quality for all students. It offers additional lessons in maths and physics, especially for the first semester, additional counselling, additional opportunities to retake exams, help with accommodation and scholarships for good results.

For the students with individual study plans lessons including interim assignments with separate timetables are offered.

(2) Expert judgement/indicator analysis

By using an electronic exam system the college has an overview of the study progress of all students, which is a precondition for substantial feedback. The 'real' feedback is to be conducted in a personalised way, which is explained in the next section.

3.4.4. Evaluation of the feedback provided to students in the course of the studies to promote self-assessment and subsequent planning of study progress.

(1) Factual situation

Information from SER (p. 29):

Generally, students get continuous feedback orally and continual feedback by e-mails sent from the electronic exam system.

Specific works by students receive comments in various ways, such as written remarks in the students' work; in other cases, works are commented generally to all students with the possibility to consult individually with the teacher at the end of the lecture or during consultations. Each interim assessment is followed by a discussion of learning outcomes.

Information from interviews:

According to the students, the teachers encourage them to proceed with further study. But most are hesitant and do not seem to have enough self-confidence. If the Transport Logistics Technologies programme had not existed, some of the students in this programme would not have taken up a course at all.

(2) Expert judgement/indicator analysis

The variety of feedback is a good method for reaching all students, taking into account the variety of tasks they are given and the variety of their personalities.

The expert panel recognises that one of the main values of the courses of the college lies in motivating prospective students to take up a course at all. Especially the part-time study programme and the logistics course lower the threshold for would-be students. Some of them might proceed to further studies if they get good results in their first cycle. In this way the college contributes to utilising the talents of young people towards their limits for the benefit of the economy.

3.4.5. Evaluation of employability of graduates and graduate career tracking in the study field.

(1) Factual situation

Information from SER (p. 30):

The SER presents an overview of the career monitoring data of graduates of both study programmes who graduated in 2016–2018. Beside this evidence for structured career tracking there is also evidence that contacts with graduates are maintained; graduates are inquired about their employment and their success in the labour market.

Information from interviews:

There are meetings between companies and graduates and visits to companies by students and teachers; this is confirmed by the stakeholders. The graduates find jobs by industry placement in the course of the study programme, and many students work and study in parallel. One student had her job in logistics first and promotion was envisaged if she completed the Transport Logistics Technologies programme.

The stakeholders would favour more cooperation in the field of freight transport for broadening the expertise of the students. The surveys are based on the STRATA statistic data; so far, the college has not introduced its own structured graduate survey about employment details.

The NEXUS lorry company approached the college and offered placements. The company is installing a database for placements, in cooperation with the college.

(2) Expert judgement/indicator analysis

Both the systematic and the personal tracking of the graduates' careers are adequate for evaluating their employability.

During the meeting with the SER staff the expert panel found out that STRATA does not deliver data about employment in the detailed specificity, but the college keeps using it; so far, they have not introduced their own structured graduate survey about employment details.

As the faculty has the opportunity of personal tracking of the graduates, the expert panel recommends implementing a structured graduate survey about employment details. It could help assess the full scale of the changes in the position of graduates in the labour market and their career changes.

3.4.6. Evaluation of the implementation of policies to ensure academic integrity, tolerance and non-discrimination.

(1) Factual situation

Information from SER (p. 31):

The college has introduced various provisions for integrity: the Code of Academic Ethics, the Personal Data Protection Procedure and the Description of Procedure of Graduation Paper Development, Defence and Assessment.

The administration staff, departmental specialists, academic group curators and lecturers are responsible for explanation and practical application of the legal provisions to students. Penalties to students for cheating, plagiarism and dishonesty during assessment are applied following the Study

Regulations and the Description of Procedure for Awarding Incentives and Imposing Disciplinary Measures to Students (2020).

Student works are uploaded to an IT system for plagiarism checking.

The evaluators of exams papers follow the Description of Assessment of Study Subject Outcomes, which sets the rules for reasonableness, reliability, clarity, usefulness and impartiality of the evaluations.

The SER also explains that the college has become a member of the United Nations Global Compact and seeks to uphold the principles of respect for human values in its relations with all members of society. Social Responsibility Reports are produced and published annually on the College's website. One case, happening in 2018, is reported where violations of codes occurred and had to be dealt with. The student indicted received a written warning and this decision was published in an anonymised way on the College website by the Academic Ethics Committee.

(2) Expert judgement/indicator analysis

With the rules the college has given itself it is well-prepared to uphold the civic and scientific principles in an adequate way. The example cited in the SER shows that the rules are also applied in practice.

Regarding intellectual property and quotation rules, the expert panel appreciates that the faculty uses plagiarism detection software for student works.

3.4.7. Evaluation of the effectiveness of the application of procedures for the submission and examination of appeals and complaints regarding the study process within the field studies.

(1) Factual situation

Information from SER (p. 31-32):

The college has given itself the Student Appeals Regulations. They define the process to be applied if a student wishes to appeal against decisions of administrative or academic nature. The most important principle is the rule that a student who submits an appeal must not suffer any harm in this regard.

The SER explains the channels an appeal has to go through and the administrative bodies that are required to deal with it.

The SER reports about two examples, in 2017 and 2019, when appeals were made which had to be dealt with in the way prescribed. In one case the student's appeal was granted, in the other case it was not. In all cases, student representatives participated in the decision making.

(2) Expert judgement/indicator analysis

The rules the college has given itself appear entirely suitable to make sure that appeals are not obstructed and dealt with fairly. The two examples cited by the college also support this appraisal.

Recommendations for this evaluation area:

The expert panel recommends implementing a structured graduate survey about employment details.

3.5. TEACHING STAFF

Study field teaching shall be evaluated in accordance with the following indicators:

3.5.1. *Evaluation of the adequacy of the number, qualification and competence (scientific, didactic, professional) of teaching staff within a field study programme(s) at the HEI in order to achieve the learning outcomes. Entrance requirements are well-founded, consistent and transparent.*

(1) Factual situation

Information from SER (p. 33-38):

The composition of the teaching staff corresponds to the requirements of the related regulations (General Requirements on Execution of the Studies, Description of the Group of Engineering Study Fields). 4 teachers holding the Doctor's degree deliver 11.9 % of the volume of the subjects under the field programmes (minimum 10% required). 85 % of the teachers delivering the study field programme (of which 3 – associate professors and 14 – lecturers) are employed at the HEI on a permanent basis (at least half of the FTE and at least for 3 years), 70 % of the teachers hold at least 3-year practical experience in the field of the subject delivered (minimum half of the teachers required). The practice placement supervisors are the teachers holding at least the Master's qualification degree or an equivalent qualification of higher education and at least 3-year experience of teaching of the field subject or of practical experience.

In the assessment period, lectures and practical classes were delivered to the students by the employees of Logistics Systems, Ltd, Public Company Lithuanian Railways, Sostena, Ltd., Trasis, Ltd., Šiaulių techninių apžiūrų centras, Ltd. (Šiauliai City Centre for Technical Inspection), Eurospektras, Ltd., and other companies.

According to the data of the academic year 2020–2021, teachers with the Doctor of Science degree deliver 11.92% of the volume of field studies: the minimum general requirement on execution of the studies is met.

(2) Expert judgement/indicator analysis

According to the data provided in the Self-Assessment Report and to the additional information provided at the meetings with the experts, the number and composition of the teaching staff within the field study programmes at the HEI could be claimed to enable successful implementation of the study programmes under the Transport Engineering field at the HEI. The qualification and scientific, didactic and professional competences of the teaching staff conducting applied research in the field of Engineering Sciences, publishing the results in the scientific journals/proceedings, and participating at the scientific and practical events are adequate for achievement of the learning outcomes. The composition of the teaching staff exceeds the requirements regulations considerably.

Another significant aspect of improvement to be mentioned is the more intensive applied research activity in the field of Transport Engineering and, respectively, higher number of scientific publications in the field-related journals.

With the reduction of the student flows (Automobile Technical Exploitation and Transport Logistics Technologies programmes are attended by respectively 82 and 77 students), the

existing field teacher to student ratio 8.0 enables the HEI to assure quality process of the studies, as the individuals consultations have become more frequent, and more possibilities for direct contact with the teacher.

Participation of teachers-practitioners in the programmes by delivering the field subjects is considered a positive aspect.

The turnover of the teachers of the programme was not high. The core of the teaching staff of the field assures the quality of execution of the studies and provides the conditions for creative, systematic cooperation. The majority of the field teachers have extensive experience in pedagogical work: the pedagogical experience of 8 teachers was 6–15 years, 10 teachers – over 15 years.

In view of the age structure of the teaching staff, it is important to perform substitution planning of the teachers approaching retirement in the near future (5 teachers are over 61 years old), including projection of the systematic preparation of new young teachers with particular emphasis on the scientific competences in the Transport Engineering field.

3.5.2. Evaluation of conditions for ensuring teaching staffs' academic mobility (not applicable to studies carried out by HEIs operating under the conditions of exile).

(1) Factual situation

Information from interviews:

Nine teachers came in from foreign countries in recent years. Several teachers went out, for instance to Portugal, Brno (Czech Republic) and Latvia.

A logistics teacher from a logistics company and a maths teacher from Hungary came by invitation by the college.

The expert panel suggests to publish more in internationally visible journals. The teachers, however, believe that their practical work might not be well suited for scientific publication. They tend to publish in the college's own journal and other journals on varying levels.

(2) Expert judgement/indicator analysis

Appropriate attention is given at the HEI to improvement of international scope of activities. The International Relations and Project Management Department holds the competition for Erasmus+ programme for teachers on a yearly basis.

Teachers visit the schools of higher education in several countries and cooperate closely with Tallinn University of Applied Sciences and Tallinn Transport Department (Estonia). Nonetheless, the number of teachers (9) who participated in the exchange programmes (including lectures or internship at foreign schools of higher education) during the assessment period was not significantly high.

The fact that the cooperation possibilities and modes are not fully used is evidenced by the relatively low number of visiting teachers. In this context, it should be noted that it is important for the teachers to participate not only in the Erasmus+ programme, but also to cooperate with foreign schools of higher education, organizations, and companies for development of applied research and project activities in the field of transport engineering.

3.5.3. Evaluation of the conditions to improve the competences of the teaching staff.

(1) Factual situation

Information from SER (p. 40):

English courses for teachers will be continued in 2021 and there are seminars for academic staff. Four teachers have a PhD degree.

Information from interviews:

The arguments expressed by the teachers and representatives of the administration at the meetings with the experts provide support for the professional development cases/forms referred to in the Self-Assessment Report: by using the state budget, own or project funds of the HEI and third parties, funding for participation in the courses, seminars, conferences, internships, Erasmus+, and other international programmes.

(2) Expert judgement/indicator analysis

Appropriate attention has been given at the HEI to teachers' improvement in the R&D, didactic, and professional activities. The process (Quality Guide Human Resource Management formal procedure, planning, organisation, funding, improvement areas, methods) is conducted systematically.

A system for development of technical competences of non-teaching staff (laboratory technicians, engineers, etc. staff, responsible for teaching, computer and laboratory equipment, used in the studies) that would be equivalent to the professional development procedure for the teaching staff should be developed.

Recommendations for this evaluation area:

- *The increasing number of guest teachers is relevant for teaching the subjects of the Transport Engineering field. Involvement of a larger number of teachers of the Transport Engineering study field in the academic exchange programme would be relevant, in parallel with the development of English language skills.*
- *More intensive teacher involvement in applied research in the field of transport engineering (commissioned by industry) is to be recommended, correspondingly leading to more active publication of research results in scientific journals.*

3.6. LEARNING FACILITIES AND RESOURCES

Study field learning facilities and resources should be evaluated according to the following criteria:

3.6.1. *Evaluation of the suitability and adequacy of the physical, informational and financial resources of the field studies to ensure an effective learning process.*

(1) Factual situation

Information from SER (p. 41-44):

The SER gives a comprehensive and detailed record of its teaching resources, including room space, laboratory places, hardware and software.

The SER (p.45) provides expert recommendations from the previous external assessment and actions taken by the faculty in both ATE and TLT programmes.

Information from interviews:

The experts inquire about the distance of the different buildings of the College. As the walk is less than 10 minutes and the timetable is designed accordingly, that is not seen as a disadvantage for the study process.

The software product chiefly used is AutoCAD, additional specialist software is not regularly used. Remote access is standard. Mathematical problems are to be solved manually by the students.

In the logistics laboratory students can practise with a barcode scanner, including software and printer. It is mainly used for practical lessons in preparation of work in the companies.

The automobile studying room has not had hybrid or electric car engine models so far, but there was a project about converting a traditional car into a hybrid car. The result will serve as a future teaching aid.

The college does not have a railway laboratory, but it collaborates with the Lithuanian Railways, which also provides a teacher.

The automotive equipment is also used in final-degree projects; for instance, there was a parcel-transport project.

The library opens for the part-time students during their weekend study times.

E-books are always accessible, thanks to cooperation with Vilnius Gediminas University.

(2) Expert judgement/indicator analysis

The experts deem the resources sufficient for the teaching that the college has to provide.

The expert panel appreciates that the faculty takes into account previous experts' recommendations for learning facilities and resources and takes actions eliminating any shortcomings.

They also welcome the involvement of college staff through examples such as finding and adapting a solution that provides students with remote access to Autodata and Hayens databases.

3.6.2. Evaluation of the planning and upgrading of resources needed to carry out the field studies.

(1) Factual situation

Information from SER (p. 44):

The SER provides an infrastructure improvement plan with means and equipment, estimated funds and implementation deadlines.

Information from interviews:

The faculty is going to collaborate with another department of the college, which already has a high-voltage laboratory and staff in order to teach infrastructure for electric cars.

Simulation programmes for virtual laboratories for use in distance mode are being planned.

(2) Expert judgement/indicator analysis

The plans for improving the laboratories appear to be adequate. The collaboration with stakeholders is proven to be valuable in this context.

The expert panel appreciates that the faculty has a solid infrastructure improvement plan, part of which is presented in the SER.

Recommendations for this evaluation area:

3.7. STUDY QUALITY MANAGEMENT AND PUBLICITY

Study quality management and publicity shall be evaluated according to the following indicators:

3.7.1. Evaluation of the effectiveness of the internal quality assurance system of the studies.

(1) Factual situation

Information from SER (p. 46):

The college has a number of papers with guidelines and regulations covering the area of quality assurance, which are presented in the self-evaluation report. The procedures and responsibilities are explained in detail. As a general document, the college uses a Quality Manual.

In practice, the Department organises frequent meetings with the Department' teachers, in which graduation papers, assignments and exam tasks are discussed and approved; research reports, performance reports of the department and proposals to improve the quality of the programme are also dealt with.

The Study Programme Committee evaluates the teaching material. Students and employers are involved into the Committee and participate in implementing and monitoring the Programme

and in taking decisions regarding the implementation of the study programmes. The Faculty Council is the body that takes the ultimate responsibility.

There is also a regular external evaluation of the programmes exerted by external teachers, students and social partners.

Information from interviews:

Inquired by the panel about more practical details, the college explains that it holds a survey after each exam session, especially after the first semester; students are reminded about participation. The results go to the staff department and the teachers. The management gives feedback to the teachers, and the curator gives feedback to the students.

Additionally, the faculty organises round tables and discussions with stakeholders and students. The curators of the study programmes are the programmes' quality agents.

The students confirm that they find a special section with assessment of teaching in the surveys, and the curators tell them the results. They notice that changes are implemented, programmes are being upgraded and resources are improved as a result.

Asked about where they seek support in case of problems, they point out that, depending on the nature of the problem, they can consult a teacher, the curator or the administration.

(2) Expert judgement/indicator analysis

The quality system is covered by a number of papers providing the necessary structures of processes.

The students appear to be well-informed about their opportunities in the quality assurance system and their influence on the faculty. They could even distinguish who is to be addressed with specific problems. The panel has won a good impression not only about the theory but also about the practice of the quality procedures.

3.7.2. Evaluation of the effectiveness of the involvement of stakeholders (students and other stakeholders) in internal quality assurance. Evaluation of the planning and upgrading of resources needed to carry out the field studies.

(1) Factual situation

Information from the interviews:

The college includes external stakeholders in their Student Programme Committee, thus giving them the opportunity to exert influence on the programmes of the faculty. It also mentioned several examples where stakeholders get involved into its affairs.

Appreciating this, the panel used the interview session with the stakeholders to inquire about the practice.

In the interview session, the stakeholders mentioned several results they could attribute to their participation in discussions with the college: Russian language lessons, guidelines for industry placements, elements of the teaching equipment in the railway classroom. Moreover, they contributed to the improvement of the study quality by employing graduates, participating in reviews of thesis papers, proliferation of new technical parts for student training, equipment in

the railway classroom and the transfer of railway literature from a railway-owned library to the college (envisaged).

(2) Expert judgement/indicator analysis

The stakeholders contributed to the improvement of the college in several ways: resources in the laboratories, but also improvements in the syllabus and counselling about the expertise they are interested in the college to teach the students. The panel can confirm that the college puts the theory explained in the SER into practice.

3.7.3. *Evaluation of the collection, use and publication of information on studies, their evaluation and improvement processes and outcomes.*

(1) Factual situation

Information from SER (p. 47-48):

The college collects a wide range of feedback from students, mainly in the form of surveys after courses, internships and graduation, after each semester. The results of the surveys are analysed at the meetings of the Department, the Dean, the Faculty Council meetings, and improvement actions are planned. Group curators discuss them with students. Changes are made with the aim to improve subjects contents, study content and study process. (As an example, the SER mentions the practice time in the study schedule.)

Information on Programme assessment and its results are made public at the meetings of the Department, the Deanery, the Faculty Council, at the Committee's meetings, and at organised round-table discussions. This information is available to all relevant groups. College-wide aggregate information is systematically analysed at directorate meetings where actions to improve performance are envisaged.

The college has developed computerised systems to manage study information. It uses databases of staff, students and employers. The system stores free elective subjects, record of internships, calculation of study fees and the development of the study plan. The electronic exam system was already mentioned in section 3.4.3.

(2) Expert judgement/indicator analysis

The system is elaborate and the functioning and efficiency are warranted.

3.7.4. *Evaluation of the opinion of the field students (collected in the ways and by the means chosen by the Centre or the HEI) about the quality of the studies at the HEI.*

(1) Factual situation

Information from SER (p. 48-49):

After each semester, formal student surveys on the subjects and the quality of teaching are organised. The survey results are published on the website. Results, according to the SER: 50 % of students agree that they have studied independently throughout the semester; 92 % agree that the assessment of the subject is clear and understandable; the resources of a subject were available and sufficient for 87 % of students. 63 % of students at the college are satisfied with

their choice of programme, 58 % of students know where to turn for help in the event of difficulties. 85 % of first year students acknowledged that they do not attend the events organised by the College yet.

Additionally, the Student Admission and Career Centre conducts an annual survey of students on their motives and expectations about the labour market.

(2) Expert judgement/indicator analysis

The examples shown by the college speak for the functionality of the processes, especially since the results are not grand in all respects but seem typical and reflect the variety of opinions in an academic institution.

Recommendations for this evaluation area:

IV. RECOMMENDATIONS

- 1. The number of contact work hours under the full-time and part-time studies differs. In case of part-time studies, part of the lectures and practical / laboratory work are conducted in the form of consultations. In order to ensure the accessibility of learning outcomes, alternatives of the applied studies and relevant assessment methods must be defined in the study module programmes.*
- 2. To assure unbiased and fair assessment of the students, it would be reasonable to present the assessment criteria reflecting the evidence used by the teacher in assessment of the knowledge and skills acquired by the student (by identifying their weight, i.e. effect on the assessment mark) in the assessment forms provided for the study modules.*
- 3. Only a small share of the topics of the final theses are related to the field of freight transportation by railway. Commissioning of the topics relevant to the sector should be sought by cooperating with one of the largest transport companies in the Baltic region.*
- 4. For the purpose of diversity of the final project topics and their closer relation to the engineering activity, it is important to seek more intensive cooperation with the social partners, who might propose ideas for the projects or commission projects relevant for company operations.*
- 5. The participation rate of students in scientific conferences should be raised with the aim of clarifying the distinction between practical work and practical research, thus supporting an improvement of the latter.*
- 6. The expert panel recommends implementing a structured graduate survey about employment details.*
- 7. The increasing number of guest teachers is relevant for teaching the subjects of the Transport Engineering field. Involvement of a larger number of teachers of the Transport*

Engineering study field in the academic exchange programme would be relevant, in parallel with the development of English language skills.

8. More intensive teacher involvement in applied research in the field of transport engineering (commissioned by industry) is to be recommended, correspondingly leading to more active publication of research results in scientific journals.

V. SUMMARY

The study programmes Automobile Technical Exploitation and Transport Logistics Technologies correspond to the public and labour market needs. The programmes' aims and learning outcomes are based on the needs of society and development fields defined in the strategic documents. The study programme is designed within the framework of the strategic development of the Šiauliai region.

The existing coherence between the programme content and qualification awarded enables the graduates to work in the transport sector. Graduates are employed at different companies in the transport market. They are able to perform automobile maintenance, diagnostics and repair. Those graduates who have gained the abilities to develop railway technologies are mainly employed at freight carrier companies.

The level of complexity of the learning outcomes conforms to the Level 6 Qualification Requirements under the European and Lithuanian Qualifications Framework for higher education. The studies are focused on preparation for professional occupation in the field of transport, enabling the acquisition of R&D-based qualification.

By ensuring the close link between the theoretical materials delivered under the subjects and practical classes as well as applying flexible (including remote) teaching and learning methods and techniques, the subjects studied play an important role in the achievement of the programmes' aims and successful implementation of the learning outcomes. The content and description of the study subjects are in line with the requirements applicable to the college and first-cycle studies, and the programme volume is sufficient in view of the expected learning outcomes.

The subjects and modules are positioned in the programmes consistently, their subjects and content/topics do not overlap. The analysis of the logical relations and sequencing of the study subjects has shown coherent positioning of the study subjects by semesters. The logical relations and sequencing of the part-time study subjects are similar to the full-time studies, but spread throughout the four-year period.

Students' opportunities of personalisation and selecting individual specialities are extensive compared with similar study programmes at other colleges. They are placed in several semesters, allowing for the piecemeal personal development of students, and cover various areas inside and outside of the subject field.

The assessment of the information available suggests that only a small share of the topics of the final theses are related to the field of railway transportation. Intensive cooperation with Lithuanian Railways is recommended for finding more topics relevant to the sector and for resuming and further developing the Transport Logistics programme. Generally, it is important to pursue more intensive cooperation with social partners for the purpose of diversity of the final theses topics and closer relation to the engineering activity.

The college gives sufficient evidence for their integrating new technological developments into its curriculum. Taking into account the main job of a college, the experts believe that what the college does in its fields has been adequate. However, the participation rate of students should be raised.

The difference between practical work and practical research appears to be blurred. The distinction should be clearer; this would help to sharpen the research profile.

The decrease of student numbers is mainly due to external causes. The experts therefore welcome the strategy of the college to involve external stakeholders to gain students.

The College presented a very detailed prescription of its procedure of recognition of external qualifications in the SER and also laid open the number of credits recognised. The requirements for accreditation are fully met. The college also attempts to support students in their academic mobility in an adequate way. The relatively weak participation is mainly due to external factors the college cannot influence.

The college offers a great variety of general support. Student information and student counselling are adequate. The offer of psychological support is a particularly valuable achievement. The experts' experience has shown that this kind of support can prevent students from giving up their studies or give them new perspectives if they remain with their decision to do so.

The teaching and learning process satisfies students' needs and enables them to achieve the learning outcomes, including some of them being allowed to study according to an individual study plan.

By using an electronic exam system the college has an overview of the study progress of all students.. Additional feedback is to be conducted in a personalised way. The variety of feedback is a good method for reaching all students, taking into account the variety of tasks they are given and the variety of their personalities. Both the systematic and the personal tracking of the graduates' careers are adequate for evaluating their employability.

The expert panel recognises that one of the main values of the courses of the college lies in motivating prospective students to take up a course at all. Especially the part-time study programme and the logistics course lower the threshold for would-be students. Some of them might proceed to further studies if they get good results in their first cycle. In this way the college contributes to utilising the talents of young people towards their limits for the benefit of the economy.

As the faculty has the opportunity of personal tracking of the graduates, the expert panel recommends implementing a structured graduate survey about employment details. It could help assess the full scale of the changes in the position of graduates in the labour market and their career changes.

Regarding intellectual property and quotation rules, the expert panel appreciates that the faculty uses plagiarism detection software for student works.

The rules the college has given itself appear entirely suitable to make sure that appeals are not obstructed and dealt with fairly. The two examples cited by the college also support this appraisal.

The number and composition of the teaching staff within the field study programmes at the HEI enable successful implementation of the study programmes. The qualification and competences of the teaching staff are adequate for achievement of the learning outcomes. The majority of the field teachers have extensive experience in pedagogical work, and turnover has been low. Participation of teachers-practitioners in the programmes by delivering the field subjects is also a positive aspect. In view of the age structure of the teaching staff, substitution planning of the

teachers approaching retirement in the near future should begin soon, with emphasis on the scientific competences in the Transport Engineering field.

Teachers visit the schools of higher education in several countries, but the number of teachers who participated in the exchange programmes during the assessment period was not high. In this context, it should be noted that it is important for the teachers to participate not only in the Erasmus+ programme, but also to cooperate with foreign schools of higher education, organisations, and companies for development of applied research and project activities in the field of transport engineering.

A system for development of technical competences of non-teaching staff equivalent to the professional development procedure for the teaching staff should be developed.

The expert panel appreciates that the faculty takes into account previous experts' recommendations for learning facilities and resources and takes actions eliminating any shortcomings. The plans for improving the laboratories appear to be adequate. The collaboration with stakeholders is proven to be valuable in this context.

The students appear to be well-informed about their opportunities in the quality assurance system and their influence on the faculty. They could even distinguish who is to be addressed with specific problems. The panel has won a good impression not only about the theory but also about the practice of the quality procedures.

The stakeholders contributed to the improvement of the college in several ways: resources in the laboratories, but also improvements in the syllabus and counselling about the expertise they are interested in the college to teach the students. The examples shown by the college speak for the functionality of the processes, especially since the results are not grand in all respects but seem typical and reflect the variety of opinions in an academic institution.

Expert panel signatures:

1. Prof. Dr.-Ing. Haldor E. Jochim, (panel chairperson), academic,
2. Prof., Dr.Sc.Eng. Irina Jackiva (Yatskiv), academic,
3. Prof. Dr. Artūras Keršys, academic,
4. Mr Edmund Lisovski, representative of social partners',
5. Mr Gytautas Urbonas, students' representative.