STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Kauno technikos kolegijos

STUDIJŲ PROGRAMOS *AUTOMOBILIŲ TECHNINIS EKSPLOATAVIMAS (653E21008)*

VERTINIMO IŠVADOS

EVALUATION REPORT

OF *AUTOMOBILE TECHNICAL MAINTENANCE* (*653E21008*)

STUDY PROGRAMME

at Kaunas Technical College

1. **Prof. Dr. Clive Neal-Sturgess (team leader)** *academic,*
2. **Prof. Dr. Jüri Lavrentjev,** *academic,*
3. **Prof. Dr. Marija Malenkovska Todorova,** *academic,*
4. **Mr. Ger Reilly,** *academic,*
5. **Dr. Vaidas Liesionis,** *representative of social partners'*
6. **Mr. Mantas Kinderis,** *students' representative*.

Išvados parengtos anglų kalba
Report language - English

Vilnius
2014

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	***Automobilių techninis eksploatavimas***
Valstybinis kodas	653E21008
Studijų sritis	Technologijos mokslai
Studijų kryptis	Sausumos transporto inžinerija
Studijų programos rūšis	Koleginės studijos
Studijų pakopa	Pirma
Studijų forma (trukmė metais)	Nuolatinė (3), ištęstinė (4)
Studijų programos apimtis kreditais	180
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Sausumos transporto inžinerijos profesinis bakalauras
Studijų programos įregistravimo data	2002-08-30

INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	Automobile technical maintenance
State code	653E21008
Study area	Technology studies
Study field	Transport engineering
Type of the study programme	College studies
Study cycle	First
Study mode (length in years)	Full time (3), part time (4)
Volume of the study programme in credits	180
Degree and (or) professional qualifications awarded	Professional Bachelor in Transport Engineering
Date of registration of the study programme	2002-08-30

CONTENTS

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.	Kaunas technical college Quality manual
2.	Student questionnaires

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

Kaunas Technical College (KTK) dates back to year 1920. The KTK functions today as a public body and possess the status of a higher education institution. The KTK is governed by the collegial governing bodies, the KTK Council, the Academic Council, Students‘ Representation and by the KTK Director, as a sole governing body.

The Vice Director for academic affairs is directly subordinate to the Director and is responsible for the

- Faculty of engineering sciences;
- Committee of transport and mechanics field study programmes;
- Committee of electric power and electronics field study programmes;
- Committee of civil engineering field study programmes;
- Study organization department;
- Study communication and career department.

The Committee of transport and mechanics field study programmes is responsible for three study programmes: „Automobile Technical Maintenance“, „Motor Transport Electronics“ and „Material Processing Engineering“. The study programme committees coordinate the study programmes in their study fields and ensure their quality, certify the subjects (modules) and assess literature for the study programmes. The study programme “Automobile Technical Maintenance” (state code 653E21008) was first implemented 01.09.2002 and provides Professional Bachelor degree in Transport Engineering. The study programme was improved in 2006/2007 according to new legal documents. “Automobile Technical Maintenance” study programme was last time evaluated in 2007 by the national expert group and the study programme was improved in 2007 according to the remarks. The SP was last updated in 2010 under requirements of ECTS credit system.

The study programme “Automobile Technical Maintenance” recent self-assessment report was developed in 2013 in accordance to the Director’s Order, concerning the self-assessment report development team and terms of the plan.

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 7th November, 2014.

1. Prof. Dr. Clive Neal Sturgess (team leader), Emeritus Professor of Mechanical Engineering, University of Birmingham (UK)
2. Prof. Dr. Jüri Lavrentjev, professor of Automotive Engineering, Department of Machinery, Tallinn University of Technology (Estonia)
3. Prof. Dr. Marija Malenkovska Todorova, professor at Bitola University, Faculty of Technical Sciences, (Macedonia)
4. Ger Reilly, Head of School, Mechanical & Design Engineering Dublin Institute of Technology (Ireland)
5. Dr. Vaidas Liesionis, *Machinery plant "ASTRA"* (Lithuania), social partner's representative.
6. Mantas Kinderis, Vilnius College of Technology and Design (Lithuania), student

II. PROGRAMME ANALYSIS

2.1. Programme aims and learning outcomes

The study program (SP) "Automobile Technical Maintenance" provides Professional Bachelor degree. The SP has two specializations: „Car technical maintenance" and „Cargo vehicle technical maintenance". The scope of the SP is 180 ECTS credits. Full-time studies take three years, and part-time studies take four years. The SP title corresponds to a study field, and the awarded Professional Bachelor's in Transport Engineering degree. The degree corresponds to the content of SP and learning outcomes.

The aims of the study program are well defined and clear: to graduate automobile technical maintenance experts who are able to:

- construct car maintenance management software design and process technology;
- organise car maintenance;
- arrange car repairs;
- organize business (unit) activities.

According to the SER, after graduating the students will be able to select and design repair technologies for automobile parts and assemblies to organize automobile technical maintenance; organize automobile diagnostics process, measure and analyse diagnostic parameters; assess the need of automobile part and assembly repair; organize automobile repair work. The aims and the learning outcomes of the study programme (SP) „Automobile Technical Maintenance" are

clearly defined. Students get the information about the SP aims and learning outcomes during their lectures which was evident from discussion with students and teaching staff.

The SP aims and learning outcomes meet the requirements of the Level 6 of the European Qualifications Framework and Lithuanian Qualifications Framework. The developed SP results correspond to the requirements for the degree awarding first cycle study programmes. As explained in the SER, the SP aims and learning outcomes are revised and updated involving stakeholders, and evaluating their opinion and technological changes in the labour market. Since the beginning of the SP implementation (2002), the SP aims and learning outcomes were revised and updated in 2004, in 2005 and in 2010. The new edition of the SP was introduced in 2012. As declared in the SER, the information about the SP aims and learning outcomes is discussed with the labour market representatives in round table discussions, organisation of practice places and signing of cooperation agreements. At the evaluation visit the company representatives admit the participation in defence committees but no evidence was found of participation in any committees or round table discussions.

According to SER, the number of transport companies, which have or plan to develop R&D departments, is growing in Lithuania. This stimulates the demand of highly qualified professionals. There is evidence, that more than 80 % of managers are satisfied with the qualification of automobile technical maintenance specialists, proving that the SP aims and learning outcomes are based on the need of labour market. It can be concluded, that the graduates of the SP "Automobile Technical Maintenance" have the possibility to be employed in transport sector enterprises. Graduates can continue their studies for Bachelor's Degree at universities.

In summary, the SP „Automobile Technical Maintenance" is in accordance with the valid national and European legal acts, market survey results and labour and education market trends.

2.2. Curriculum design

The type and structure of the SP „Automobile Technical Maintenance" corresponds to the General Regulation of Technological (Engineering) Science Field, the Order of the Minister of Education and Science of Lithuania Description of General Requirements for Degree-Awarding First Cycle and Integrated Study Programmes and the Regulations on Compatibility of the University Study Programmes to the European Credit Transfer System (ECTS). The SP volume is 180 ECTS credits. Full-time studies take three years (6 terms), and part-time studies take four years (8 terms). In full-time studies each semester comprises 30 credits, in part-time studies – 21-24 credits.

The SP is composed of four parts:

1. general subjects of college studies, 15 credits
2. core and compulsory subjects, 141 credits
3. specialization subjects, 15 credits
4. optional subjects, 9 credits.

The part of general subjects of college studies comprises 15 credits. The core and compulsory subjects comprise 141 credits, broken down as the theoretical fundamentals of engineering – 15 credits, basic engineering subjects (including automobile technical maintenance subjects) – 78 credits, social science subjects – 6 credits, practice – 30 credits, graduation thesis – 12 credits. Specialization subjects comprise 15 credits for each specialization. Optional subjects comprise 9 credits.

The subjects in the SP are positioned so that the subjects subsequently studied are based on the results achieved in the previously studied subjects. Students, completing more than 60% of the study plan, can choose one of specializations. The specialization subjects are located in the last two semesters of studies, comprising 15 credits each.

As discovered by the assessment team at the evaluation visit, the laboratory facilities for the following subjects are too small, and did not appear to be properly equipped with the necessary tools and equipment:

- Laboratory for Physics
- Laboratory for Mechanics
- Laboratory for Exploitation materials

It is therefore unclear if the practical work that can be supported in these laboratory rooms is sufficient to support the learning outcomes of the related subjects. Despite this fact remark is more related to material resources, but it does relate to achievement of learning outcomes of practical work in the labs. The matter is discussed in more detail in the relevant chapter.

Studies in SP are divided to theoretical lectures, practical and laboratory works, tutorial with teacher and individual studies. At the site visit it was explained to the assessment team, that for the individual studies the students can use library or Inter-disciplinary Centre. Neither of these rooms are completely suitable for group work, discussions, etc. There is a need for the college to consider an additional room for these purposes.

As claimed in SER, teaching/learning methodological and material packages developed by the KTK teachers meet the latest science and technology achievements. They are placed in electronic form in the KTK website and virtual learning environment Moodle. It is positive that the SP includes advanced subjects „Electric cars“ and „Hybrid technologies“. Understandably it is challenging to collect appropriate study materials and compose meaningful laboratory

subjects. There is only one copy of relevant literature in the library, the actions should be taken to increase the number of related literature.

In summary, the curriculum design meets the requirements, is well balanced between theoretical and practical parts. It included modern subjects and the content of subjects and modules are appropriate for the achievement of the intended learning outcomes of the SP.

2.3. Teaching staff

As stated in the SER, the teaching staff in KTK is employed in accordance with the regulation on Studies and Science of Lithuania. All pedagogical staff is employed by open competition, applying clear criterion of rating. In the SP 8 teachers employed on regular basis have doctoral degree, 11 teachers have Master‘s degree, others have corresponding degree qualification.

As stated in the SER, the academic staff of the SP corresponds to the General Regulation of Technology (Engineering) Sciences. All teachers have previous pedagogical experience. In total 33 % of the engineering field subjects are taught by teachers who have doctoral degree. The core professional subjects of the SP are taught by teachers from which 55 % have more than 3 years of practical experience. This corresponds to the regulation on Science and Study of Lithuania.

The SP „Automobile Technical Maintenance“ employs 8 associated professors and 21 lecturers, 5 teachers work on part-time basis. The full-time pedagogical workload in KTK is 618 – 1161 hours, and it depends on the position of a staff member. There was no data provided of the workload of the teachers in Annex 2. Therefore it is difficult to estimate, if the load is reasonably distributed. The biggest academic load that was observed was 27 credits taught, which is relatively large number.

As it can be seen in the SER, in the last 3 years, the mean age of teachers has rapidly decreased. Teachers aged between 31-45 years constitute 33 %, teachers aged 41-50 years constitute 30 %, teachers of 51-65 constitute 27%, and teachers over 65 years constitute 10 % of all teachers. The majority of teachers belong to the 30-50 age group. In accordance with the regulations in Lithuania, the student/teacher rate for the technological field studies is 11. This ratio is maintained in the SP „Automobile Technical Maintenance“.

The total number of teachers who developed their qualification has decreased recently (SER). The number of individual cases associated with improvement of staff qualifications has decreased in last 5 years. According to the information from the evaluation meeting with the staff, the new academic staff already has good qualifications (scientific degrees) and they do not

need further qualification improvement. However it is always advisable to improve the pedagogical level of the new employees.

In KTK the competence of the pedagogical staff is assessed according to their scientific activity. However, as it can be seen from the SER, in 2013 only 2 scientific papers were published of which only 1 was related to the SP. The teachers did not give any lectures abroad, and there is no participation in ERASMUS mobility schemes. Considerable numbers of teachers have marked their English language level as „preliminary“, which could be the reason for low activity in teacher' exchanges.

2.4. Facilities and learning resources

The teaching process for the SP takes place in classrooms, laboratories and in the practical training centre. The most relevant facility to the SP is KTK Bosch practical training centre. In the centre, modern automotive diagnostics and repair equipment is used to teach the subjects related to technical maintenance. The centre also has a room for engine and electrical equipment studies. No engine test stand was however available and the lack of working engine test stand was the also raised in evaluation meeting with students. Recently the KTK established a multidisciplinary practical training centre with pneumatic and hydraulic test-stands and automatic production equipment, but it is not clear how the centre is used in assessed SP.

In the SER it is stated, that there is a workshop at the KTK where technological practices are organized. As already outlined in Section 2.2, at the site visit to KTK it appeared that the workshop room size and the equipment was not adequate, considering the number of students in the groups (30-40 people), even if one allowed for the tasks to be organized for smaller groups. It has also been observed, that the laboratory rooms for the subjects

- Technical measurements
- Mechanics
- Engineering and exploitation materials

were not entirely appropriate to ensure the adequate level of practical exercises. The premises do not have a sufficient number of modern equipment. It was not clear whether and how the laboratory excercises for the related subjects are conducted. At the site visit it was not fully possible to verify the laboratory works carried out in the these laboratories and the methodology used.

KTK has a student library with a reading room. There are approximately 30 work places in the reading room, ten of which are computerized. The library literature is regularly updated, and there are specialized journals related to the SP “Automobile Technical Maintenance”. There is

also a combination of recent text books but at the same time rather outdated text books. KTK subscribes to the „EBSCO Publishing“ and “Emerald” databases, with journal and bibliographic and technical data.

The KTK needs to speed up the renovation of the space and room for study and its library and develop a more enhanced working solution for students until the library room renovation is completed. It is positive that the KTK has a cooperation agreement with Kaunas University of Technology, which provides the possibility to make use of their library and reading-room services. According to information provided by students in the evaluation meeting it is located not far from the KTK and is easily accessible.

In the SP „Automobile Technical Maintenance“ the following practices are present:

- Training practice I (metalwork),
- Training practice II (welding),
- Professional activity practice,
- Automobile service technology practice,
- Final practice.

Training practices (Training practice I and Training practice II) take place at the KTK practical training centre, described above. Professional activity practice, Automobile service practice and Final practice are performed in different automobile service companies. It was claimed at the meeting with staff who comprised the SER team, that the college has a sufficient number of agreements with companies for work placement. It seems that companies are satisfied with the knowledge and practical skills of students and during these practices students can apply theoretical knowledge and develop their practical professional skills. Practices are supervised by specialists with enough professional experience. There is some uncertainty, if all these companies have enough modern equipment and technologies comparable with the training centre of the KTK.

In summary, there are facilities that are in good condition and equipped with new equipment. However, there are number of important laboratory facilities that need to be improved and are not equipped with a sufficient number of modern equipment. Also, the library condition and the state of the literature would need major improvements.

2.5. Study process and students‘ performance assessment

The admission to the KTK is conducted on the basis of relevant legislation acts of Lithuania. The state-funded study places are provided according to ranking order. This order is composed considering final examinations, performance results and additional criterion. The main

criterion for applicants to the SP "Automobile Technical Maintenance" is: secondary school examination performance results in 3 subjects (mathematics – 40 %, physics – 20 %, Lithuanian – 20%) and the annual mark in foreign language (20%). The additional criteria, such as good results in international and local competitions etc are also taken into account. It is positive that according to the SER, the SP „Automobile Technical Maintenance" is one of the most popular college study programmes in Lithuania and the number of admitted students is growing annually.

The study process at KTK is organized by the study organization department, implemented by the Faculty Dean's office and study programme committees. The full-time SP lasts for three years. The length of the full-time semester is 20 weeks, 2 weeks of the semester are allocated to examination sessions and 2-6 weeks are allocated to practice. Graduates have 9 weeks for the graduation thesis preparation. The full-time student workload for an academic year is 30 credits. Approximately 60 % of credits are for contact hours and about 40% are for independent work.

Students' performance is constantly monitored during their studies. The presented data in the SER reveals that student drop-out rate in the SP is high, but the situation has improved in the last period. Majority (80 %) of drop-out students terminate their studies on the first academic year. This is caused by extrinsic factors such as lack of motivation, or relatively poor preparation of secondary schools. On the third academic year the most frequent reason for the drop-out on the third year is the unfinished graduation work.

According to information from the meeting with students they are satisfied with the study process. The college uses Moodle and the student stated that library resources are accessible despite ongoing library renovation. The teachers give adequate feedback to the students on their academic performance and results. Students stated that they would like to have more visits to different automotive companies.

As outlined in the SER, the students on the programme are encouraged to participate in R&D activities. There was no evidence however of any examples of any type of research in the last period. At the meeting with students no student could give any examples of their participation in applied research. The representatives from companies did not remember any cases when they worked on a research activity with KTK.

Student mobility in KTK has been possible since 2005, when KTK received its Erasmus university charter. However, as stated in the SER, the participation of the SP „Automobile Technical Maintenance" students' in Erasmus mobility programmes is inadequate. During the assessed period there were no students who had travelled to foreign universities for exchange study. This was confirmed in the evaluation meeting with students. The reasons for low activity is that the students are generally employed at the same time as they complete their studies and

cannot leave for financial reasons. The second principal reason is the insufficiency of foreign languages skills among students.

The Assessment system for students' learning achievements consists of an intermediate assessment and the final examination. The teachers outline the assessment methodologies to students at the beginning of the course. For the assessment of students' academic achievements a ten point system is applied (10 – excellent, 9 – very good, 8 – good, 7 – highly satisfactory, 6 – satisfactory, 5 – sufficient, 4 – insufficient, 3,2,1 – very bad). In order to get objective assessments of study results the cumulative grade system is generally applied. The different study parts (laboratory work, independent work, tests, examination grade) form the final grade. As stated in the SER, students are informed about the requirements, related learning outcomes, assessment structure and the assessment criteria at the beginning of the course. This was also confirmed by students at the meeting with assessment team during the site visit.

At the site visit the assessment team opinion was, that the grades, which students get for their final thesis appear too high, considering the level of the thesis. The descriptive part is generally too long, sometimes the information presented is not relevant. The thesis should perhaps be more oriented towards achieving the goal, not just brief description and general solution of the problems. The representatives from the companies who participate in the final thesis committees also mentioned that sometimes the high grades for the thesis are not always justified.

The student support system consists of different scholarships and loan systems and is considered sufficient. The scholarships are awarded taking into account the student's results of the previous semester. The students can get also a social scholarship, which is provided by the government. The state-funded and state supported loans are available for the students. The state loan is the loan to cover study costs. The KTK students are provided with dormitory facilities. The student dormitory has places for 300 residents. According to the information from students, the fees for rooms are reasonably low and there are no problems to rent a room.

Graduates professional activity and employment is one of the key factors to evaluate the quality of SP. According to the SER, graduate employment research in KTK is carried out regularly. There was however no evidence that there is a well established system to maintain contacts with alumni which would make the system more reliable. According to the SER, the employment rate of the KTK graduates in last few years has been more than 80%. Employers opinions presented at the evaluation meeting with the social partners about the KTK trained specialists are generally good. About 10 % of graduates of the SP after graduation continue their studies at universities.

2.6. Programme management

The study programme implementation and monitoring is lead by the Committee of transport and mechanical field study. The meetings of the SP Committee are declared to be public. Experts, subject (module) developers, members of the Academic Council and Faculty Board, representatives of administration may be invited to the meetings.

Information on the study programme implementation is, according to SER, collected periodically. As declared in the SER, since the 1st of January, 2014, the KTK study quality assurance policy and quality improvement strategy for 2014-2016 is valid.

As described in the SER, the internal assessment process involves periodic surveys of students, teachers, employers and graduates and involvement of employers in different decision bodies. At the site visit however, the students could remember only one questionnaire being issued for them to complete in the study period. The assessment team requested a copy of a recent student questionnaire form and did receive an example.

The employers advised the evaluation team that they participate in final thesis defence committees. According to the SER, at the end of practices in companies, the employers express their opinion to the college on the standard and performance of students. In the student practical training diary there is a questionnaire for employers, and the supervisor of the student work practice has to fill this in. The practice supervisor at the KTK analyses the answers and presents the analysis conclusions to the Chairperson of the SP Committee.

Application of internal and external assessment results has been used for developing annual quality improvement of the SP, which are referred to different levels: teachers, the department and the faculty. The recent examples according to SER are: improvement of the final thesis quality, decreasing rates of dropout, more positive assessment by employers, and updating of the study facilities. The last assessment of the SP was carried out in 2007. As stated in the SER, each of the recommendations presented in the assessment report, were taken into account and changes in the SP and academic activities after the last assessment were performed. The changes and actions are described in the SER and they are relevant.

Students express their opinion through the Students Union. However, students do not seem to be very active in this regard and this process should be addressed and improved. The teachers, who are not included in the work of the SP committee and administration, also participate in quality assessment and improvement activity of the SP – mostly by analysis of academic results. According to the SER, the employers review the SP and the study subject descriptions, and organize the seminars and training at companies for the KTK teachers. In this training, the teachers are introduced to new technologies, and the opportunities to improve the teacher's

professional qualification are provided in realistic modern work environments. However, at the site visit none of the employers attending could give any examples of these types of activity.

According to the SER, the partial and complete assessment of the SP quality is carried out. The partial SP assessment is carried out determining the demand for the SP improvement according to the surveys performed and by evaluating the market changes, as well as the employers' recommendations. Indirectly the SP is assessed during the annual assessment of the academic subdivision performance. The comprehensive internal SP assessment is carried out according to the SP assessment methodology. According to the methodology developed, the comprehensive assessment is performed every three years.

III. RECOMMENDATIONS

1. It is recommended for teachers to work more towards achieving a higher level of participation in international exchange programmes; The college needs to develop a strategy for the development of international exchange for staff and to increase the numbers of staff engaging in this type of activity;
2. It is necessary for the college to devise and implement a strategy to improve the level of foreign (English) language of teachers;
3. More research activities directly related to the SP could be considered to help guide the future direction of the programme.
4. The college needs to increase the pace of the renovation process for the library and study room should start as quickly as possible and in the interim period the college needs to provide a better alternative solution for students to the one currently available. ;
5. Outdated books should be removed from the library and the college should devise a strategy for the update of the literature and textbooks available for use on the programme;
6. The rooms and equipment used for practical exercises for a number of subjects should be considerably modernised and expanded to cater for the numbers of students taking this programme.
7. The college and programme committee needs to develop and implement a methodology to increase the participation of students in the applied research activity and in the international student mobility;
8. The level of the final thesis should be improved and the grades awarded to the thesis should be correlated better with the standard and level of quality of the thesis.
9. The feedback from students and employers should be collected in a more systematic and regular way;
10. The application of the process to programme development and monitoring should be better documented and improved.

IV. EXAMPLES OF EXCELLENCE (GOOD PRACTICE)*

The Practical Training Centre (the Bosch centre) in the KTK is an excellent example of public–private partnership (PPP). In this case the college (public body) and private business together fund and operate this technically advanced centre. The college provides the room and the company provides the very recent equipment. For mutual interests the service is offered to the college and also for other companies.

V. SUMMARY

The SP „Automobile Technical Maintenance“ is in accordance with the valid national and European legal acts, market survey results and labour and education market trends. The aims and the learning outcomes of the SP „Automobile Technical Maintenance“ are clearly defined. The SP is attractive and popular among students. The graduates are in high demand by companies.

Study subjects in the SP are distributed evenly, their content is not repetitive. The learning outcomes are sufficiently supported by the subjects and modules. The SP meets the new science and technology level. Some subjects in the study program are not supported by laboratory rooms and equipment. Some subjects, related to new technology are not entirely supported by appropriate study materials.

Teaching staff is relatively young, active and sufficiently well motivated. They have a high standard of education and most of them have a good record of practical experience in the field in which they teach. Some of the teaching staff are active in publishing their scientific results, but the applied research is not evenly distributed over the teaching staff. The international mobility of teachers could be further improved.

There are some modern laboratories in the college. At the same time the college has laboratories for certain subjects which are well below the usual standard for the educational public body nationally and internationally. This can influence considerably the quality of education offered by the college.

The study process and student assessment is generally organized in a good manner. The students’ performance is constantly monitored. The problem of student drop-out has been actively treated and some improvement has been achieved. The students are encouraged to participate in foreign exchange programs but due to varying reasons almost no activities have been recorded. There are virtually no examples of student participation in applied research. The technical and academic level of the final thesis should be improved.

The SP management is done on good level. The monitoring of the SP is generally clearly organized. The outcomes from internal and external assessments are taken into account. The data collected from students and companies should be organized on a more regular basis.

VI. GENERAL ASSESSMENT

The study programme *Automobile technical maintenance* (state code – 653E21008) at Kaunas Technical College 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	4
2.	Curriculum design	4
3.	Teaching staff	3
4.	Facilities and learning resources	2
5.	Study process and students' performance assessment	3
6.	Programme management	3
	Total:	**19**

*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: Prof. Dr. Clive Neal Sturgess

Grupės nariai:
Team members: Prof. Dr. Jüri Lavrentjev

Prof. Dr. Marija Malenkovska Todorova

Ger Reilly

Dr. Vaidas Liesionis

Mantas Kinderis

Vertimas iš anglų kalbos

<...>

VI. APIBENDRINAMASIS ĮVERTINIMAS

Kauno technikos kolegijos studijų programa Automobilių techninis eksploatavimas (valstybinis kodas – 653E21008) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	4
2.	Programos sandara	4
3.	Personalas	3
4.	Materialieji ištekliai	2
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	3
	Iš viso:	**19**

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

<...>

V. SANTRAUKA

Studijų programa „Automobilių techninis eksploatavimas“ atitinka galiojančius nacionalinius ir Europos teisės aktus, rinkos tyrimų rezultatus ir švietimo rinkos tendencijas. Studijų programos „Automobilių techninis eksploatavimas“ tikslai ir studijų rezultatai yra aiškiai apibrėžti. Ši studijų programa yra patraukli ir populiari tarp studentų. Programos absolventai labai reikalingi įmonėms.

Studijų programos dalykai paskirstyti tolygiai, jų turinys nesikartoja. Atskiri dalykai ir moduliai tinkamai padeda siekti numatytų studijų rezultatų. Studijų rezultatai atitinka naujausią mokslo ir technologijų lygį. Tačiau kai kuriems studijų programos dalykams nėra skirta pakankamai laboratorijos kabinetų ir įrangos. Kai kuriems su naujausiomis technologijomis susijusiems dalykams nėra skirta tinkamos mokomosios medžiagos.

Pedagoginis personalas yra santykinai jaunas, aktyvus ir pakankamai motyvuotas. Programos dalykus dėstantys pedagogai yra labai išsilavinę ir dauguma jų yra sukaupę turtingos praktinės dėstomų dalykų patirties. Kai kurie pedagogai aktyviai skelbia savo mokslinio darbo rezultatus, nors taikomuosiuose moksliniuose tyrimuose pedagogai dalyvauja nevienodu mastu. Tarptautinis dėstytojų judumas galėtų būti labiau plėtojamas.

Kolegijoje yra kelios modernios laboratorijos. Tačiau kai kuriems dalykams skirtos Kolegijos laboratorijos neatitinka valstybinės švietimo įstaigos standartų nei nacionaliniu, nei tarptautiniu mastu. Tai gali daryti reikšmingą neigiamą įtaką Kolegijos teikiamoms švietimo paslaugoms.

Apskritai mokymosi procesas ir studentų pasiekimų vertinimas organizuojamas gerai. Vykdoma nuolatinė studentų veiklos stebėsena. Studentų nubyrėjimo problema aktyviai sprendžiama, ir šioje srityje situacija gerėja. Studentai skatinami dalyvauti tarptautinių mainų programose, tačiau dėl įvairių priežasčių šioje srityje iš esmės nebuvo vykdoma jokios veiklos.

Studijų kokybės vertinimo centras

Faktiškai nėra jokių studentų dalyvavimo taikomojoje mokslo veikloje pavyzdžių. Turėtų būti gerinamas techninis ir akademinis baigiamųjų darbų lygis.

Studijų programos valdymas yra gero lygio. Apskritai studijų programos stebėsena yra tinkamai organizuota. Kolegija tinkamai atsižvelgia į vidaus ir išorės vertinimo rezultatus. Studentų ir įmonių atsiliepimų duomenys turėtų būti tikslingiau apibendrinami.

<…>

III. REKOMENDACIJOS

1. Dėstytojams rekomenduojama dėti daugiau pastangų, siekiant aukštesnio dalyvavimo lygmens tarptautinėse mainų programose; Kolegija turi parengti darbuotojų tarptautinių mainų plėtros strategiją ir padidinti tokioje veikloje dalyvaujančių darbuotojų skaičių.
2. Kolegijai būtina parengti ir įgyvendinti dėstytojų užsienio (anglų) kalbos mokėjimo lygio kėlimo strategiją.
3. Platesnė tiesiogiai su šia studijų programa susijusi mokslo tiriamoji veikla galėtų padėti aiškiau apibrėžti jos vystymosi kryptis ateityje.
4. Kolegija turėtų paspartinti bibliotekos ir skaityklos renovacijos darbus, taip pat Kolegija turėtų ieškoti geros alternatyvos esamai bibliotekai;
5. Iš bibliotekos fondų reikėtų išimti pasenusias knygas, o Kolegija turėtų parengti literatūros ir programai įgyvendinti naudojamų knygų atnaujinimo strategiją.
6. Daugelio dalykų praktiniams užsiėmimams naudojamos auditorijos ir įranga turėtų būti atnaujinta; jos taip pat turėtų būti daugiau, kad ja galėtų naudotis visi pagal programą besimokantys studentai.
7. Kolegija ir programos komitetas turėtų parengti ir įgyvendinti studentų dalyvavimo mokslo tiriamojoje veikloje ir tarptautinio studentų judumo programose plėtros metodiką.
8. Studentų baigiamieji darbai turėtų būti aukštesnio lygio, o jų vertinimo pažymiai turėtų tiksliau atitikti taikomus standartus ir baigiamųjų darbų kokybę.
9. Turėtų būti sistemingiau ir reguliariau renkami studentų ir darbdavių atsiliepimai;
10. Turėtų būti tobulinamas ir geriau dokumentuojamas procesų taikymas programai vystyti ir stebėsenai vykdyti.

<…>