STUDIJŲ KOKYBĖS VERTINIMO CENTRAS
CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

PRODUCTION and MANUFACTURING ENGINEERING FIELD OF STUDY

KAUNO KOLEGIJA

EXTERNAL EVALUATION REPORT

Expert panel:

1. Panel chair: Prof. dr. Jasmina Casals-Terré …….. (signature)
2. Academic member: Associate professor dr. Tadej Petric;
3. Academic member: Prof. dr. Tavo Kangru;
4. Social partner representative: Dr. Vaidas Liesionis;
5. Student representative: Mr Matas Žalandauskas

SKVC coordinator: Dr. Ona Šakalienė

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I. INTRODUCTION

1.1. OUTLINE OF THE EVALUATION PROCESS

The field of study evaluations in Lithuanian higher education institutions (HEIs) are based on the following:

- Procedure for the External Evaluation and Accreditation of Studies, Evaluation Areas and Indicators, approved by the Minister of Education, Science, and Sport;
- Methodology of External Evaluation of Study Fields approved by the Director of the Centre for Quality Assessment in Higher Education (SKVC);
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The evaluation is intended to support HEIs in continuous enhancement of their study process and to inform the public about the quality of programmes within the field of study.

The object of the evaluation is all programmes within a specific field of study. A separate assessment is given for each study cycle.

The evaluation process consists of the following main steps: 1) Self-evaluation and production of a self-evaluation report (SER) prepared by an HEI; 2) A site visit by the review panel to the HEI; 3) The external evaluation report (EER) production by the review panel; 4) EER review by the HEI; 5) EER review by the Study Evaluation Committee; 6) Accreditation decision taken by SKVC; 7) Appeal procedure (if initiated by the HEI); 8) Follow-up activities, which include the production of a Progress Report on Recommendations Implementation by the HEI.

The main outcome of the evaluation process is the EER prepared by the review panel. The HEI is forwarded the draft EER for feedback on any factual mistakes. The draft report is then subject to approval by the external Study Evaluation Committee, operating under SKVC. Once approved, the EER serves as the basis for an accreditation decision. If an HEI disagrees with the outcome of the evaluation, it can file an appeal. On the basis of the approved EER, SKVC takes one of the following accreditation decisions:

- **Accreditation granted for 7 years** if all evaluation areas are evaluated as exceptional (5 points), very good (4 points), or good (3 points).
- **Accreditation granted for 3 years** if at least one evaluation area is evaluated as satisfactory (2 points).
- **Not accredited** if at least one evaluation area is evaluated as unsatisfactory (1 point).

If the field of study and cycle were **previously accredited for 3 years**, the re-evaluation of the field of study and cycle is initiated no earlier than after 2 years. After the re-evaluation of the field of study and cycle, SKVC takes one of the following decisions regarding the accreditation of the field of study and cycle:

- To be accredited for the remaining term until the next evaluation of the field of study and cycle, but no longer than 4 years, if all evaluation areas are evaluated as exceptional (5 points), very good (4 points) or good (3 points).
- To not be accredited, if at least one evaluation area is evaluated as satisfactory (2 points) or unsatisfactory (1 point).

1.2. REVIEW PANEL

The review panel was appointed in accordance with the Reviewer Selection Procedure as approved by the Director of SKVC.

The composition of the review panel was as follows:

1. Panel chair: Prof. dr. Jasmina Casals-Terré, Professor at Technical University of Catalonia-BarcelonaTech Mechanical Engineering Department, Spain;
2. Academic member: Associate professor dr. Tadej Petri, Associate professor at Jožef Stefan International Postgraduate School (MPŠ) and senior research associate in the Department of Automation, Biocybernetics and Robotics, Ljubljana, Slovenia;
3. Academic member: Prof. dr. Tavo Kangru, Professor at Tallinn University of Applied Sciences TTK, Institute of Technology, Estonia;
4. Social partner representative: Dr. Vaidas Liesionis General director of the Closed Limited Company (UAB) Machinery Plant, Lithuania;
5. Student representative: Mr Matas Žalandauskas second year student in the Renewable energy engineering study programme at Vilnius College, Lithuania.

1.3. SITE VISIT

The site visit was organised on 11th of November 2024 onsite.

Meetings with the following members of the staff and stakeholders took place during the site visit:

- Senior management and administrative staff of the faculty(ies);
- Team responsible for preparation of the SER;
- Teaching staff;
- Students;
- Alumni and social stakeholders including employers.

There was a need for translation during the meeting with PhD Rima Jasnauskaitė.

1.4. BACKGROUND OF THE REVIEW

Overview of the HEI

Kauno kolegija (KK), established in 2000, is a state multidisciplinary higher education institution in Lithuania, operating as a public institution under national and European regulations. KK serves approximately 4,600 students with 800 employees and 36,000 graduates. It offers 49 Professional Bachelor programs across 34 fields, two short-cycle programs, and operates four faculties (Business, Technologies, Medicine, Arts and Education) along with a regional division in Tauragė. Managed by a Director with three deputies, KK's governance includes the KK Council and Academic Council, supported by administrative units overseeing studies, science, partnerships, and organizational development.

The Production and Manufacturing Engineering (PME) study field is offered at the Faculty of Technologies (FT). The Faculty of Technologies is led by a Dean, with academic management overseen by the Vice Dean for studies and a newly introduced Vice Dean for science. The Faculty consists of three departments: Industrial Engineering and Robotics, Food and Agricultural Technologies, and Informatics and Media Technologies, all of which manage study programs and applied research activities.

Overview of the study field

The Production and Manufacturing Engineering (PME) study field is offered at the Faculty of Technologies (FT), which has 84 academic staff members and 776 students as of October 2023. FT provides 11 study programs and 2 short-cycle programs across various disciplines, including Industrial Design Engineering (IDE), Furniture Manufacturing Engineering (FME), and the upcoming Visual Communication Engineering program. Other programs include Cyber Systems, Multimedia Technology, Software Systems, and more. The PME study programs are coordinated by the Department of Industrial Engineering and Robotics, which, as of October 2023, had 75 students and 23 academic staff members. The PME studies began in 2020 with the IDE program, followed by FME in 2022, after its transfer from Materials Technology.

Previous external evaluations

The FME program, which was positively accredited in 2004 and 2012, underwent updates in response to industry trends and stakeholder feedback, including a title change in 2022 from Furniture and Woodwork Manufacturing to Furniture Manufacturing Engineering. Further revisions, including course updates, were made, and in November 2023, the PME Study Field Committee resolved to rename the program to Furniture Engineering, with the change approved by the Academic Council for implementation in July 2024. A self-assessment report for the PME study field was prepared by a working group for external evaluation.

Documents and information used in the review

The following documents and/or information have been requested/provided by the HEI before or during the site visit:

- *Self-evaluation report and its annexes*
- *Final theses*

Additional sources of information used by the review panel:

The following additional sources of information have been used by the review panel: -web site.

II. STUDY PROGRAMMES IN THE FIELD

First cycle/LTQF 6

Title of the study programme	**Industrial Design Engineering**	**Furniture Manufacturing Engineering**
State code	6531EX063	6531EX068
Type of study (college/university)	College	College
Mode of study (full time/part time) and nominal duration (in years)	Full-time (3 years)	Full-time (3 years)
Workload in ECTS	180	180
Award (degree and/or professional qualification)	Professional Bachelor in Engineering Sciences	Professional Bachelor in Engineering Sciences
Language of instruction	Lithuanian	Lithuanian
Admission requirements	At least secondary education	At least secondary education
First registration date	27/09/2019	01/09/2000
Comments (including remarks on joint or interdisciplinary nature of the programme, mode of provision)		

First cycle/LTQF 6

Title of the study programme	**Visual Communication Engineering***
State code	6533EX006
Type of study (college/university)	College
Mode of study (full time/part time) and nominal duration (in years)	Full-time (3 years)
Workload in ECTS	180
Award (degree and/or professional qualification)	Professional Bachelor in Engineering Sciences
Language of instruction	Lithuanian
Admission requirements	At least secondary education
First registration date	09/11/2023
Comments (including remarks on joint or interdisciplinary nature of the programme, mode of provision)	* interdisciplinary study programme

III. ASSESSMENT IN POINTS BY CYCLE AND EVALUATION AREAS

The **first cycle** of the Production and Manufacturing Engineering field of study is given a **positive**/**negative** evaluation.

No.	Evaluation Area	Evaluation points[1*]
1.	Study aims, learning outcomes and curriculum	2
2.	Links between scientific (or artistic) research and higher education	3
3.	Student admission and support	3
4.	Teaching and learning, student assessment, and graduate employment	3
5.	Teaching staff	3
6.	Learning facilities and resources	3
7.	Quality assurance and public information	3
	Total:	20

IV. STUDY FIELD ANALYSIS

AREA 1: STUDY AIMS, LEARNING OUTCOMES AND CURRICULUM

1.1.	Programmes are aligned with the country's economic and societal needs and the strategy of the HEI

FACTUAL SITUATION

1.1.1. Programme aims and learning outcomes are aligned with the needs of the society and/or the labour market

According to the SER, Lithuania's furniture industry is significant economic sector generating 2.5% of GDP and exporting 90% of its production and has attracted substantial investments, creating 1,400 new jobs between 2021 and 2023 in the Kaunas region. The wood industry, integral to the Baltic States, contributes 7% of Lithuania's GDP, with wood products making up 12% of exports (€4.2 billion in 2022).

The visual communication engineering sector spans publishing, printing, advertising, and packaging, with Lithuania producing 4.6 million books annually, and spending €160 million on books and periodicals. While digital publishing and audiobooks grow, traditional books and printed packaging

1*

1 (unsatisfactory) - the area does not meet the minimum requirements, there are substantial shortcomings that hinder the implementation of the programmes in the field.
2 (satisfactory) - the area meets the minimum requirements, but there are substantial shortcomings that need to be eliminated.
3 (good) - the area is being developed systematically, without any substantial shortcomings.
4 (very good) - the area is evaluated very well in the national context and internationally, without any shortcomings.
5 (exceptional) - the area is evaluated exceptionally well in the national context and internationally.

maintain strong demand. Over 1,500 companies provide printing services, and 4,400 offer advertising and design solutions.
The aims and learning outcomes are defined in terms of both the academic content and professional requirements for Professional Bachelor level studies in Furniture Manufacturing Engineering (FME), Industrial Design Engineering (IDE), which conforms with the high-level manpower needs of the labour market in the country and specifically in the Kaunas region related to these two areas. The aim and learning outcomes of the interdisciplinary program on Visual Communication Engineering, while stated to be covering the following areas: publishing, printing, advertising, packaging design and production, are finally only focused on printing and packaging needs.
Employers who participated in the review group meeting with alumni and stakeholders, emphasized that the quality of studies is very good. Employers represented the Furniture Manufacturing Engineering and Industrial Design Engineering study programmess, but not for the visual communication engineering program, which the social partner/industrial partner was from the printing industry.

1.1.2. Programme aims and learning outcomes are aligned with the HEI's mission, goals, and strategy

According to the SER, the aims and learning outcomes of the first-cycle professional bachelor programs in Industrial Design Engineering (IDE), Furniture Manufacturing Engineering (FME), and Visual Communication Engineering (VCI) within the Production and Manufacturing Engineering field are established in alignment with national and European legislation, the KK Strategy, and input from stakeholders and employers. VCI is an interdisciplinary program, combining a major in Production and Manufacturing Engineering with a minor in Design.
Table 1 from the SER summarizes the aims of the three study programs:
The Industrial Design Engineering (IDE) program trains manufacturing engineers with expertise in material technologies, manufacturing process management, and practical skills in digital product design. Graduates are equipped to solve engineering problems and select appropriate tools and equipment for implementing solutions. The Furniture Manufacturing Engineering program prepares creative professionals skilled in furniture technologies, design, and production planning, adaptable to market changes. It is intended that the Visual Communication Engineering program will train professionals in the design and production of digital media and printed books using interdisciplinary engineering knowledge.

ANALYSIS AND CONCLUSION (regarding 1.1.)

The study programs in Furniture Manufacturing Engineering (FME) and Industrial Design Engineering (IDE), are designed to meet labour market demands, based on the SER analysis and the opinion of the representatives present in the review meeting. Notably, KK is the only higher education institution in Lithuania offering the FME program. However, the Visual Communication Engineering study program was only supported by a representative from a printing company, and there was a lack of support from local stakeholders representing the whole market of digital media.
However, while the aim of Visual communication engineering should be training professionals in designing and producing visual communication products using interdisciplinary engineering knowledge, the program is more focused on traditional press engineers and the name of the study program does not match the learning outcomes, misleading the prospective students.

From the analysis of the study programme a maximum of 60 credits can be related to production and manufacturing engineering subjects (considering that Technology and Final internship can be chosen to be in the field of production and manufacturing engineering).

Subject Name	Credits
Materials Science	6
Manufacturing Processes and Equipment	6
Printing Technologies	6
Digital Printing Technologies	3
Automation Systems	6
Production and Finishing Technologies	6
Enterprise Engineering	3
Packaging and Advertising Design	6
Technology Internship	6
Final Internship	12

On the other hand a maximum of 75 credits are related to visual communication subjects

Subject Name	Credits
Basics of Visual Communication	6
Graphic Design	6
Visual Product Design 2D	6
Visual Produof 75ct Design 3D	6
Computer Graphics 2D	6
Electronic Publishing and Digital Design	6
Packaging and Advertising Design	3
Media and Information Literacy	3
Creative Problem Solving	3
Psychology of Communication	3
Management of Visual Communication Business	9
Final Internship (Visual Communication Focus)	12
Technology Internship (Visual Communication Focus)	6

From the analysis of the two prior tables, the VCE programme places a significant emphasis on design-related learning outcomes, such as Graphic Design, Visual Product Design, and Computer Graphics. While these are valuable in the context of visual communication, they diverge from the core focus of Production and Manufacturing Engineering, which traditionally

centers more on optimizing production systems, improving efficiency, and managing the practical aspects of manufacturing operations.

The skills required for the design of visual products (e.g., advertising and packaging) are more aligned with design engineering or graphic design fields, rather than the engineering focus of manufacturing systems, materials processing, and large-scale industrial production.

Learning outcomes in the VCE programme, such as conducting experiments to solve problems in the design and production of visual communication products, are heavily oriented toward creative design and aesthetic considerations. These outcomes, while important, do not directly address the production and manufacturing challenges faced in fields like production line management, industrial process optimization, and materials handling—areas typically covered in a Production and Manufacturing Engineering programme.

The subjects in the VCE programme, including Packaging and Advertising Design, Digital Printing Technology, and Production Finishing Technology, focus on product-specific processes rather than general manufacturing engineering concepts like supply chain management, quality control, lean manufacturing, and advanced manufacturing technologies.

The VCE programme is interdisciplinary, encompassing areas of design, advertising, and publishing, with a limited connection to the traditional engineering disciplines involved in Production and Manufacturing Engineering. While interdisciplinary approaches are valuable, they make the programme more aligned with design-focused careers rather than those in production and manufacturing engineering, where knowledge of process engineering, automation, and industrial systems is paramount.

In contrast, Production and Manufacturing Engineering typically requires a deeper understanding of industrial systems, process engineering, and the integration of production technologies, which is not clearly evident in the VCE programme's focus.

The VCE programme's research-oriented subjects (e.g., practical training, applied research) are primarily focused on the optimization and development of visual communication technologies. In contrast, research in Production and Manufacturing Engineering typically addresses issues such as production system design, process innovation, and manufacturing automation, which are not the primary focus of the VCE programme.

The title, the study aims, and the intended learning outcomes of VCE should be rethought, as the focus of the SP is not related to Production and Manufacturing Engineering. The names of programmes should be clear, not misleading, and linked to the intended learning outcomes of the field of study (fields of study) in accordance with the Order of the Minister of Education and Science of the Republic of Lithuania No. V-1075 of 01-12-2016 "On the Approval of the List of Fields of Study and Groups of Fields of Study in Higher Educational Institutions, the Procedure for Changing the List of Fields of Study, the Framework of Qualification Degrees, and the Principles of Titles of Degree Programmes" Švietimo ir mokslo ministro 2016-12-01 įsakymas Nr. V-1075 , Dėl studijų krypčių ir krypčių grupių, pagal kurias vyksta studijos aukštosiose mokyklose, sąrašo, jo keitimo tvarkos, kvalifikacinių laipsnių sąrangos ir studijų programų pavadinimų sudarymo principų patvirtinimo".
It is noted the high demand of Furniture Manufacturing Engineering and Industrial Design Engineering specialists in Kaunas region. Hence these programmes can contribute to meeting the needs of the industry, especially in the Kaunas region. **During the visit only one representative from a printing company attended the stakeholder's meeting, and the focus of engineer's**

need was placed on wood manufacturing, design and printing not on visual communication products and the programme has not been able to gather enough students.
The College initially did not launch the Visual Communication programme, as the SER does not mention any students accepted into it. According to the clarifications provided during the review meeting, only six applications were submitted, and the programme did not start due to insufficient enrolment. The minimum number of study places for engineering studies is 10, in accordance with the Order of the Minister of Education, Science and Sport of the Republic of Lithuania No. V-522 “On Determining the Minimum Number of Study Program, Study Places in State Higher Schools According to Study fields and (or) Groups of Fields and Study Levels”(Dėl minimalaus studijų programų studijų vietų skaičiaus valstybinėse aukštosiose mokyklose pagal studijų kryptis ir (arba) krypčių grupes ir studijų pakopas nustatymo).

Therefore, the VCE program seems not to be well aligned with the industry needs, and there is a lack of demand for this programme.

It should be noted that the expected outcomes of the Programme (VCE) do not include the outcomes provided in the Engineering descriptor, which are related to the context of the problems of adjacent study areas and their solutions, in the context of commercial (economic) engineering activities.

1.2.	Programmes comply with legal requirements, while curriculum design, curriculum, teaching/learning and assessment methods enable students to achieve study aims and learning outcomes

FACTUAL SITUATION

1.2.1. Programmes comply with legal requirements

The IDE, FME, and VCE study programs comply with the established requirements for first-cycle collegiate study programs. According to the Table 2 in the SER the three programs.
The number of credits should be at least 180 ECTS but not more than 210 ECTS, and all the three programs are 180 ECTS.
The credits related to the study field must be at least 120 ECTS. In case of IDE there are 156 ECTS, in case of FME there are 138 ECTS and in case of VCE there are 156 ECTS. **However, in VCE program, as it has been mentioned in previously on 60 of these credits can be directly linked to Production and Engineering Field, the rest are either basics or nor focused on Visual communication and not engineering.**
The credits specified by the HEI or chosen by the students should be not more than 90 ECTS. In case of IDE program are 9 ECTS, in case of FME are 27 ECTS and in case of VCE are 24 ECTS. The final thesis must be at least 9 ECTS. Being 11 ECTS in case of IDE and FME and 12 ECTS in case of VCE. The internship should be at least 30 ECTS, in case of IDE it is 33 ECTS and in FME and VCE it is 30 ECTS in both. Practical training should be at least ⅓ of the programme volume, being 34,05 % in case of IDE, 33.65% in case of FME and in case of VCE 33.1%.
Contact hours are 45.5% in IDE program, 47,9 % in FME and 47,7% in VCE, being always higher than 20% as established.
Self-study hours are 54.3% in IDE program, 51,8 % in FME and 52.3% in VCE, being always higher than 30% as established.
All of these comply with the legal requirements for the field and cycle of study.

The scope of these three study programs is 180 credits, 4800 hours. The three programs are planned to be carried out in 6 semesters of 30 credits in full-time form.

1.2.2. Programme aims, learning outcomes, teaching/learning and assessment methods are aligned

During the meetings with the SER group and teachers, the teachers answered the experts' questions on how to ensure the subject results, and how to select study evaluation methods. However, according to experts, it is necessary to review whether all the subject modules really ensure the knowledge and abilities provided for in the table of the expected programs study results or whether there are no redundant lists of subjects (Annexes Table 1 to 3). The aims and learning outcomes of the field and cycle study programmes are expressed in five categories, aligned with EUR-ACE standards.

The Learning outcomes (LO) should be more expressed in terms of what the students are able to do after graduation. Avoid formulations like; knowledge, understands, awareness etcetera. For instance, in Furniture Manufacturing Engineering (LO number 1 and number 7), in Industrial Design Engineering the LO number 3 or in Visual communication engineering the LO number 1, number 2, number 3.

The table of expected Programs study results and links between study subjects are presented on page 1 (FME), 3 (IDE) and 5 (VCE) of the SER ANNEXES.
According to the authors, the study subjects (modules) listed in the graphs of the table help to achieve the study results, knowledge and abilities. However, many modules are listed for each ability For example, in VCE – Information Technology, Mathematics, Statistics and Data Processing are recorded to achieve social skills or in FME Physics and Material Sciences are recorded to achieve social skills or Professional English is recorded to achieve research abilities. **From the experts' point of view, English does not relate to research abilities, neither Materials sciences, mathematics, statistics and data processing are social skills.**

1.2.3. Curriculum ensures consistent development of student competences

The description states that the study subjects in the Program are designed in such a way that their "content fulfils the study results and the subsequent study subjects are based on the study results achieved in the previous study subjects", mostly in FME and IDE programs. However, in VCE program study subjects of fundamental engineering such as physics or material sciences are in 3rd semester and other more specific subjects such as Visual Product design is introduced in 2nd semester. In FME, the subject on social physiology in the first semester does not have a direct link to other subjects, as it was also stated by the students during the visit. In FME the study program does not includes subjects related to design, which would be a nice addition to the programme.

While in the FME and IDE programs there are subjects that address the acquisition of the understanding of relevant standards and their applications in VCE program it is not clear in the description of the subjects.

While FME and IDE the description of the study programmes matches the expected study results in case of VCE the goal of creating visual communication projects and producing products, solving engineering tasks applying production equipment, materials and tools and given the duration of the programme (3 years), some subjects are of too general nature may not be enough to achieve the results.

1.2.4. Opportunities for students to personalise curriculum according to their personal learning goals and intended learning outcomes are ensured

In the three study programs, there are “elective” subjects in the 2nd and 3rd academic years. While in FME program students can choose between two different subjects in each elective subject for the 2nd and 3rd year, in the other two programs while the subjects are named elective there is no option two choose from. In all three programs the optional subjects are 3 credit courses.

The possibilities of individualization of studies are realized by coursework, choosing practice places and topics of final theses. Students have the opportunity to participate in the academic mobility program and study some subjects in foreign higher education institutions.

In the SER, the possibility for students to individualize their studies is regulated by the Description of the procedure for personalising the study process of a student/unclassified student with a disability and (or) learning difficulties, according to which they can ask for an individual plan adapting the time table and the exams.

1.2.5. Final theses (applied projects) comply with the requirements for the field and cycle

According to the SER, the Bachelor thesis are regulated by Procedure for preparing, defending and storing final thesis and organising final examinations at KK, and the Descriptor of the group of study fields of Engineering Sciences.
In the provided Annexes, the topics presented for 1st cycle are relevant for FME and IDE programmes.

No mention in the SER about any specific training on how to prepare the theses. According to the SER, the tools to detect plagiarism are implemented (TURNITIN), but the use of other collective intelligence tools such as CHATGPT are not considered. In the review meeting, students and teachers agreed on the need to get information about the novel collective intelligence tools such as ChatGPT.

ANALYSIS AND CONCLUSION (regarding 1.2.)

There is a great need for specialists who have completed College studies, mostly on study FME and IDE. Given the fact that the need of VCE specialist is based on a study and not based on local inputs from social partners and the demand for the studies it is low this first year, the need for specialist in the field of VCE is not fully supported or the title of the study programme is misleading given the nature of the subjects offered.

The order of the study subjects is logical in the different study programmes starting with foundation all production engineering subjects in the first year, necessary for the students to develop further in the specialization areas. However, in the FME there is room to include some design related subjects (perhaps removing subject such as Social Psycology). In all programmes subjects related to resource planning tools should be included and in VCE subjects related **to the acquisition of the understanding of relevant standards and their applications.**
Regarding to VCE programme, there are few results related to the knowledge of engineering activities and their commercial application.
The currently relevant study outcomes of the Programme and the scope of study subjects provided for in its content should be adjusted in the future taking into account the changing trends of

engineering activities and the set of necessary skills in order to fully respond to the needs of the industry.

There is no sufficient information about assessment for each module, in addition to the overall documents outlined in the SER. However, after the review meeting, the students reported a good mix of teaching and learning methods to deliver the courses which are appropriate for achieving the desired leaning outcomes such as lectures, practice, laboratory work and projects.

Students are given the opportunity to individualize their studies by choosing alternative study subjects (in FME study programme) and internships and Bachelor thesis topics in other programmes. In the opinion of the expert group, the College provides students with sufficient opportunities to individualize their studies taking into account personal goals and opportunities.

The Bachelor thesis are relevant topics in Production and Manufacturing Engineering field for the FME and IDE Programmes, and some of them linked to industry related topics. The Bachelor thesis show a good combination of analysis, simulation and experimental work for both programmes, however for IDE programme most of them they are related to furniture and there is a lack of broader topics which could be also covered by the programme.

AREA 1: CONCLUSIONS

AREA 1	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle		X			

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

1. **Align VCE Programme Content to the Title:** It is recommended to change the title of the VCE study programme to align it with the programme contents, addressing the local inputs from social partners and to fulfil the Order of the Minister of Education and Science of the Republic of Lithuania No. V-1075 of 01-12-2016.
2. **Match LO to Stakeholder Needs:** Align more the VCE learning outcomes to Production and Manufacturing Engineering study field and the existing facilities.

For further improvement

1. **Address Stakeholders Needs:** It is recommended to take advantage of the social partners and companies in the area to involve them in the preparation of the list of topics for final projects, specifically in the IDE to open the range of topics and not only focusing on furniture related topics.
2. **Increase Number of Elective Subjects:** Based on students review meeting, It is proposed to include more optional subjects in the field of arts and design, which would satisfy the need for the preparation of the design part for FME.

AREA 2: LINKS BETWEEN SCIENTIFIC (OR ARTISTIC) RESEARCH AND HIGHER EDUCATION

2.1.	Higher education integrates the latest developments in scientific (or artistic) research and technology and enables students to develop skills for scientific (or artistic) research

FACTUAL SITUATION

2.1.1. Research within the field of study is at a sufficient level

Applied science and arts activities at KK align with the institution's strategic goals, integrating research into studies and addressing societal challenges at both national and regional levels. Collaboration with local businesses and international partners drives relevant research and innovation in fields such as Production and Manufacturing Engineering. The annual international conference *"Innovations in Publishing, Printing, and Multimedia Technologies" (IPPMT)* underscores KK's commitment to research dissemination and academic-industry collaboration. Research is seamlessly integrated into the PME curricula through practical assignments, internships, and project-based learning, with courses like Wood Cutting Theory, Furniture Production Technology, and Production Equipment regularly updated based on faculty research on materials and production processes. External collaborations further enhance applied research, with projects on alumina coatings and wood-composite tools conducted alongside partners such as the Lithuanian Energy Institute and Vytautas Magnus University.

2.1.2. Curriculum is linked to the latest developments in science, art, and technology

The curriculum in PME programmes reflects current scientific and technological advancements. For example, the Production Equipment course introduces laser wood cutting and surface finishing, while Furniture Production Technology covers 3D printing and scanning technologies. Faculty members remain informed of industry trends through professional associations, expert groups, and continued training, ensuring that courses are aligned with technological innovations.

2.1.3. Opportunities for students to engage in research are consistent with the cycle

Students engage in research through internships, coursework, and final thesis projects (PBTs), applying theoretical knowledge to practical challenges. Faculty integrate their research into teaching and mentor students in developing PBTs, often in collaboration with industry partners on real-world projects. Students also participate in conferences, hackathons, and contracted activities, gaining valuable professional experience. However, there is room to enhance student involvement by actively recruiting and encouraging them to participate in research and providing better access to modern equipment, such as edge banding and drilling tools.

ANALYSIS AND CONCLUSION (regarding 2.1.)

KK's PME study programmes, particularly FME and IDE, effectively integrate research and technological advancements into the curriculum, offering students opportunities to develop research skills and apply them to industry-relevant contexts. Regular curriculum updates ensure alignment with the latest scientific and technological developments, while collaborations with external partners enhance the relevance and impact of applied research activities. These strengths indicate a strong alignment with the evaluation criteria, as students are equipped with skills that meet industry

demands and reflect modern advancements. It is important to note that the VCE programme, which was planned to start in 2024, did not commence due to insufficient student enrolment.

However, there are some shortcomings and areas for improvement. While the programme meets the core requirements, enhancing the international profile, expanding structured research opportunities, and ensuring sustainable long-term funding would strengthen its overall impact. Additionally, greater effort is needed to actively recruit and involve students in research activities and address limitations in access to modern equipment to further enrich the student learning experience.
The evaluation criteria are fully met. KK demonstrates notable achievements in integrating research into the curriculum and fostering local partnerships, though improvements in internationalization, structured student engagement, and funding sustainability would elevate the programme's standing.

AREA 2: CONCLUSIONS

AREA 2	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle			x		

COMMENDATIONS

1. **Strong Industry Collaboration**: KK's partnerships with local industry stakeholders, such as Stevila, UAB, and BCT, UAB, provide students with practical, hands-on experience and enable research projects with real-world applications.

2. **Participation in International Conferences:** KK actively organizes and participates in events like the *"Innovations in Publishing, Printing, and Multimedia Technologies" (IPPMT)*, offering a platform for students and faculty to present their research.

RECOMMENDATIONS

To address shortcomings

1. **Enhance Structured Research Opportunities for Students**: While students can engage in research through their PBTs, more structured opportunities are needed to ensure greater student participation in research, especially for those who may not independently seek out these experiences.
2. **Strengthen International Collaborations and Visibility**: KK has taken steps to engage internationally, yet its visibility and collaborative efforts could be further strengthened.

For further improvement

1. **Increase Research Dissemination Beyond Conferences**: Although KK's faculty and students participate in international conferences, more can be done to publish research in high-impact journals or industry publications.

2. **Broaden Access to Cutting-edge Equipment and Facilities**: While KK's facilities have been updated with modern equipment, continued investment in state-of-the-art resources will be essential as technological demands evolve.

AREA 3: STUDENT ADMISSION AND SUPPORT

3.1.	Student selection and admission is in line with the learning outcomes

FACTUAL SITUATION

3.1.1. Student selection and admission criteria and procedures are adequate and transparent

The minimal competitive score of the entrant is at least 4.3 and has to meet the requirements set by the Ministry of Education, Science and Sport of the Republic of Lithuania Student selection and admissions processes at Kaunas College are conducted with high levels of transparency. Comprehensive information is readily available on the College's official website, ensuring accessibility for all. According to the SER in 2021, the competitive scores for students admitted to state-funded study placements in Furniture Manufacturing Engineering ranged from 4.6 to 7.14 with an average score of 5.21, while non-state-funded placements ranged from 4.75 to 4.99. For Industrial Design Engineering, the state-funded placements ranged from 4.6 to 7.46 with an average score of 5.41, whereas non-state-funded placements ranged from 4.36 to 5.07 In 2022, state-funded competitive scores in Furniture Manufacturing Engineering ranged from 4.35 to 8.09 with an average of 5.93, and non-state-funded placements had a score of 7.91. For Industrial Design Engineering, state-funded scores ranged from 4.6 to 7.23 with an average of 5.46. In 2023, Industrial Design Engineering state-funded placements had competitive scores ranging from 5.22 to 7.80 with an average of 5.69, while non-state-funded placements ranged from 4.38 to 6.41. The competitive scores of students admitted to state-funded study placements are generally higher than those for non-state-funded placements. The drop-out rates are very small, according to administration staff, around 5%.

The College initially did not launch the Visual Communication programme (VCE), as the SER does not mention any students accepted into it. According to the review meeting, only six applications were submitted, and the programme did not commence due to insufficient enrollment. While the minimal competitive score for entrants is set at no less than 4.3, in line with the requirements of the Ministry of Education, Science and Sport of the Republic of Lithuania, and student selection and admissions processes at Kaunas College are conducted with high levels of transparency—ensuring comprehensive information is readily available on the College's official website—this cannot be fully evaluated for the Visual Communication programme, as no students were admitted.

3.1.2. Recognition of foreign qualifications, periods of study, and prior learning (established provisions and procedures)

Since 2021, Kaunas College has been authorized to validate the higher education qualifications of prospective students acquired through foreign educational programs and international organizations. Students can apply to have the learning outcomes from their previous formal or non-formal studies credited. Up to 75% of the study programme's volume may be credited, with the exception of those whose achievements have already been recognized by Kaunas College. In 2021, thirty-four students, in 2022 – seventy-nine students, in 2023 – one hundred and ten students applied for academic recognition. But only 11 students had their achievements credited. In 2021, three students; in 2022, five students; and in 2023, three students. Which is very low knowing that out of 223 students only 11 of them had their achievements credited.

ANALYSIS AND CONCLUSION (regarding 3.1.)

While Kaunas College excels in maintaining transparency and accessibility in its admissions process, the institution faces challenges in recognizing and crediting prior learning outcomes from foreign qualifications. By improving the processes for validating and crediting prior learning, Kaunas College can enhance its appeal to international students and better support their integration into the academic environment. Additionally, the College could consider providing more guidance and support to prospective students during the application and credit transfer processes to improve their chances of success.

3.2.	There is an effective student support system enabling students to maximise their learning progress

FACTUAL SITUATION

3.2.1. Opportunities for student academic mobility are ensured

Kaunas College ensures transparent academic mobility opportunities. All full-time and part-time students who have completed their first year of study and meet the formal requirements of these programmes are eligible to apply for study/internship placements under the Erasmus+/Nordplus or other exchange programmes. Student must participate in an election during their last year of studies. This process is held twice annually by the International Relations Unit under the Director's order and considers academic achievements, student motivation, foreign language proficiency, and relevance of the study plan to the Kaunas College program. According to the SER, during the period under evaluation, 14 students participated in Erasmus+ partial exchange programmes. 4 of them went for long-term studies and 10 for short-term study mobility. Additional support is provided to students from disadvantaged backgrounds. Information on these opportunities is available on the Kaunas College website, intranet, and social networks, according to personal research and the self-evaluation report. However, students need to be more motivated to study abroad, especially for long-term studies, because those who went abroad only did so for short-term studies. Only two third-year students told that they went abroad, so it is recommended to further motivate students to study in other countries as it is beneficiary for further student improvement.

3.2.2. Academic, financial, social, psychological, and personal support provided to students is relevant, adequate, and effective

Kaunas College ensures transparent, relevant, adequate, and effective communication regarding the support provided to students. The self-evaluation report outlines comprehensive actions undertaken to achieve these objectives, detailing various measures to assist students throughout their academic journey. These measures include consultations and information on study, career, and financial issues, which enhance students' quality of life and reduce their burdens during their studies. During the introductory week, students are familiarized with relevant documents and facilities. Additionally, the library and scientific communication services are readily accessible to students. Students also have opportunities to participate in various activities, receive support for special needs, and access psychological services in three different languages. Financially disadvantaged students, those whose level of working capacity is 45 per cent or less or whose level of disability is severe or moderate and who have been granted state care may apply for a social grant. Students can also use the possibility of taking a state or state-sponsored loan to pay for tuition, living expenses, or partial studies. 2 students of the SF PME signed loan contracts between 2021 and 2023, 1 student in 2021/2022, no students in 2022/2023, and 1 student in 2023/2024. The students who study in placements that are not funded by the state and have financial problems can pay the tuition fee in instalments following the Description of the procedure for paying, refunding and recovering the fees

for studies and services related to studies at KK. During the period under assessment (2021-2023), 7 students in the field of PME applied and paid their tuition fees in instalments: students in 2021/2022, 3 students in 2022/2023, and no students in 2023/2024. In the period under assessment, 69 students were awarded incentive grants for their best academic performance. 68 students were awarded one-off scholarships in cases provided for in the Regulation on Awarding scholarships in KK. The State Study Fund administers social grants. Based on the information provided by the Fund, over the past three years, 23 students received social grants in the amount of 6.5 basic social allowance. After visiting Kaunas College, it is confirmed that all actions are indeed taken, and the support is provided to the students, it is effective and transparent. KK students also have a way to communicate with administration through student council and students are all in order to get support that they need. Surveys are taken in order to eliminate displeasures while studying. Students are able to initiate changes for example, students asked to make a meeting in order to speak about introduction to internships. Also, while talking to students it is mentioned that students are currently facing gaps in design knowledge within their studies and are experiencing limited time to learn and master the skills taught at KC. To address these issues and improve the overall quality of their academic experience, it is recommended that actions are taken to enhance support and provide more resources for students.

3.2.3. Higher education information and student counselling are sufficient

Kaunas College provides transparent information about education and student counselling by familiarizing first-year students with all necessary legal documents regulating the study process, the organizational structure, the structure of the Faculty, the procedure of organizing studies, the study schedule, and the procedure for organizing the examination schedule, among other things. Additionally, Student Representatives assign a student-tutor to each first-year student group to assist with questions regarding their studies and activities after lectures. After the visit, it is confirmed that students have access to all the information they need via KK website, additionally, students can reach out to student representatives in order to get help if they are unable to find higher education information. Also, teachers are available if students need counselling regarding their studies. The library is available to find books, but students mainly use the virtual library, and it is fully accessible at home and at KK premises. While the specific opportunity to discuss written assignment mistakes isn't explicitly mentioned in the SER, students do have multiple ways to seek feedback and discuss their academic progress with teachers.

ANALYSIS AND CONCLUSION (regarding 3.2.)

Kaunas College promotes academic mobility by offering opportunities through Erasmus+/Nordplus and other exchange programs. Eligibility is based on academic achievements, motivation, foreign language proficiency, and the relevance of the study plan. Additional support is provided to students from disadvantaged backgrounds. There is a need for increased motivation for long-term studies abroad, as most students opt for short-term placements. Comprehensive support measures are in place, including consultations on study, career, and financial issues. During the introductory week, students are familiarized with relevant documents and facilities. Access to library and scientific communication services is readily available. Support for special needs and psychological services is provided in three languages - English, Russian and Lithuanian. Students can communicate with the administration through the Student Council, and surveys are conducted to address any issues. The College ensures that information is accessible via the website and through student representatives. First-year students are familiarized with all necessary legal documents regulating the study process. Student Representatives assign tutors to assist first-year students. The virtual library is fully accessible both on-campus and remotely. Kaunas College excels in providing transparent and accessible opportunities for academic mobility, support, and counselling. The

College's commitment to transparency is evident in its detailed communication and comprehensive support measures. However, there is room for improvement in motivating students to engage in long-term study abroad, which can significantly enhance their academic and personal growth. By addressing the need for increased motivation for long-term studies abroad and continuing to enhance support and communication channels, Kaunas College can further strengthen its commitment to student success and development.

AREA 3: CONCLUSIONS

AREA 3	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle			x		

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

1. **Increase Design Courses in FME program:** Students lack knowledge of design in their studies.
2. **Extended lecture Time**: students lack time to learn and master skills that are taught in KC.
3. **Increase the laboratory session to different materials:** Students want to work more with different materials, rather than wood.

For further improvement

1. **Increase opportunities to go abroad:** Students should have more opportunities to study abroad, especially long-term.

AREA 4: TEACHING AND LEARNING, STUDENT ASSESSMENT, AND GRADUATE EMPLOYMENT

4.1.	Students are prepared for independent professional activity

FACTUAL SITUATION

4.1.1. Teaching and learning address the needs of students and enable them to achieve intended learning outcomes

The structure and content of the IDE and FME study programmes are sufficient to successfully acquire the desired learning outcomes.

The overall purpose of the VCE curriculum is somewhat unclear. The curriculum includes both visual communication and engineering subjects, but the connections between them do not seem to form a whole. The modest laboratory capacity in this area can be a threat to the achievement of applied learning outcomes.

Although the content of the study programmes covers all the important areas/subjects, the student has quite limited opportunities to shape his or her own learning path, which may be important for the development of a self-aware student. Narrowing free elective subjects in the study programmes can hinder achieving important learning outcomes or study motivation.

The study programmes have a feedback system implemented, which ensures systematic updating of the programmes, ensuring the contribution of regional entrepreneurs and other important parties to the development of the study programme. Reviewing the student feedback loop would be somewhat reasonable, emphasising that wider student involvement in the study programme and subject content is ensured. A well-functioning and transparent feedback system has several important aspects, such as students' broader understanding of the study programme and the field of study and the opportunity and obligation to design and follow the programme.

The academic year and semester-based planning are clear and understandable to all parties and are similar to the systems used in neighbouring countries.

Various learning methods are used, including traditional such as seminars, case studies, problem analysis and solving workshops, individual and group projects, discussions, report presentations, study trips, and the latest interactive methods, such as distance learning using the VLE Moodle capabilities. The broad scope of the methods is sufficient to achieve the learning outcomes and develop self-learning skills for students. However, the importance of field-specific laboratories and their purposeful use in engineering programmes should be emphasised here. To effectively acquire learning outcomes, the laboratories must be systematically updated, the tools, equipment, and technological cells used must be sufficient, and they must cover the selection of essential technologies in the field. Discussions with the parties involved and tours of the laboratories highlighted the need to review the laboratories' development plans and, if possible, diversify the scope of use of technical materials which would ensure better acquisition of learning outcomes.

The evaluation process is based on principles of clarity, reasonableness, objectivity, publicity of the assessment criteria, and mutual respect and confidentiality. Different assessment methods are used to test knowledge, evaluate a problem-solving report, assess skills demonstrated in the laboratory, assess the performance of practical tasks, perform case studies, assess the ability to collect and analyse data and assess internship and project reports.

Students who complete the PME (IDE and FME study programmes) study field can continue their education to the next level either directly or through bridging courses. Students are aware of this opportunity, and each year, some students continue their studies.

4.1.2. Access to higher education for socially vulnerable groups and students with individual needs is ensured.

Access to higher education for socially vulnerable groups and students with individual needs is ensured by making efforts to improve the learning environment for students with special needs and disabilities. Lifts are available for students with reduced mobility in order to allow easier access to lecture rooms on any floor. Special parking is available for easier access to college premises. For students with visual impairments, Kaunas College uses special computer software in order to help students comprehend learning materials. Lecture rooms are renovated and designed in a way that students with mobility issues can move freely using assistive devices, which is later confirmed after taking a tour around Kaunas College. Furthermore, Kaunas College offers individual timetables for theoretical and practical activities, as well as consultations and deadlines for socially vulnerable students, administration spoke freely regarding this, and it is confirmed that they are letting socially vulnerable students have different schedules to make their studies easier. Socially disadvantaged

groups are provided with various tuition reductions and social grants. Surveys are taken as well in order to improve and upgrade the infrastructure of a college. According to KK staff, plans are made to make the learning process of socially vulnerable groups even better.

ANALYSIS AND CONCLUSION (regarding 4.1.)

KK has created sufficient prerequisites and opportunities for students to acquire the necessary learning outcomes. The study programmes are balanced, covering theoretical topics and practical skills necessary to fulfil the learning outcomes. The minimum proportion of elective subjects in the curriculum could be highlighted, which is not a direct threat but may inhibit learning motivation for some students and thereby affect the achievement of their learning outcomes and academic progress.

Different learning methods are used in the study courses, varying them based on the needs of the lecturer and the subjects. The existing laboratories are in use and equipped with the necessary technological capabilities. However, the availability of laboratories to students could be significantly increased, and if possible. The technological capabilities of the laboratories could be expanded, considering the needs of local companies. The assessment system is clear and reasonable, and no shortcomings in its functioning were identified.

4.2.	There is an effective and transparent system for student assessment, progress monitoring, and assuring academic integrity

FACTUAL SITUATION

4.2.1. Monitoring of learning progress and feedback to students to promote self-assessment and learning progress planning is systematic

The student progress and feedback system are described in the KK *Study Procedure* and the *Description of the procedure for assessing learning achievements*. It is systematic and ensures sufficient feedback to the student to promote self-assessment.

At the beginning of each course, the implemented system is introduced to students together with a course description, assessment system, and assessment criteria. The lecturer provides continuous feedback throughout the course. The interim assessment results are systematically entered into the Study Management System, similar to the exam results. Students who fail the exam have the opportunity to take one free re-exam during the exam session or, in case of academic debt, three attempts during the semester.

The progress of students based on the curriculum is analysed on a semester-by-semester basis at the faculty level, and the results are discussed at Dean’s Office meetings. Based on the analysis, the Department of IER and the PME Study Field Committee prepare an action plan and submit proposals for curriculum development.

Although feedback from lecturers to students is well organised, feedback from students to lecturers and to the Study Programme Committee (SPC) should definitely be promoted, thereby ensuring the development of lecturers and study programmes from the student's perspective. Although KK implemented such a system, the extent of its use has not been fully clarified.

4.2.2. Graduate employability and career are monitored

KK graduates of Industrial Design Engineering and Furniture Manufacturing Engineering are well employed. This fact is well proofed by data in SER and during meetings with graduates, alumni and employers. Many students are employed during the studies period and It's shows demand of graduates in local industry. Career monitoring system is described in SEB as 3 levels system:

a) institutional level;
b) LES information;
c) annual monitoring of study field.

It looks that first level is most informative and useful.

Expert group would recommend to make career monitoring data or alumni available on KK website as it could help marketing of study field for future students.

It's hard to assess potential employability of future Visual Communication Engineering programme alumni as no students in this study programme yet. This shows low marketing level of study programme or not correct programme positioning as engineering programme. Also, only one employer, representative of the press company said that he needed graduate, he was looking for. Expert group did not get a clear picture that Visual Communication Engineering trains such a specialist.

4.2.3. Policies to ensure academic integrity, tolerance, and non-discrimination are implemented

KK has implemented various policies and measures for both students and academic staff, the principles and standards of which are outlined in the *Code of Academic Ethics*, to ensure academic honesty, tolerance, and non-discrimination in both directions.

Although measures have been implemented, students, faculty, and support staff may need to be more aware of, recognise, and implement them. To create a stronger non-discrimination culture, it would be wise to integrate the Code of Academic Ethics even more into the study program subject.

Although KK pays great attention to preventing plagiarism and inappropriate use of information sources, technology has rapidly developed in this area in recent years, sometimes making it difficult for both academic staff and the student body to make the correct decision. Consequently, it is necessary to constantly review this topic and implement new measures when necessary.

4.2.4. Procedures for submitting and processing appeals and complaints are effective

KK has developed a clear and straightforward process for receiving and handling appeals and complaints within the study course and the thesis framework. The process has been introduced to both the student body and academic staff.

Currently, it is difficult to assess the effectiveness of this process because no cases have been registered. The lack of cases may be due to good cooperation between parties, distrust of the process from the sender's point of view, or some other unknown factor. At this point, it would be reasonable and useful to explain the necessity of the process's principles in more detail so that the parties' distrust of the process is excluded or unknown factors are detected, if any.

ANALYSIS AND CONCLUSION (regarding 4.2.)

KK has implemented a system to monitor student learning progress and provide feedback. The system's principles and scope have been communicated to all parties, and they have been instructed to use it. The accumulated data is analysed at several levels, and proposals for mitigation actions are developed.

Providing feedback is part of the teaching staff's daily work and is carried through on an ongoing basis. The feedback provided by students is generally minimal, and at this point, it would be reasonable to increase this to some extent by explaining the need for feedback to the students.

The KK has implemented various activities and measures for both the student body and the academic staff to ensure academic integrity, tolerance and non-discrimination in both directions. A clear and understandable process is in place for receiving and handling appeals and complaints both within the framework of the course and the final thesis. Since not a single case has been registered, it is difficult to assess the overall functioning of the implemented system. At this point, it would be sensible to continue to educate and raise awareness among community members about these issues to create an inclusive and respectful environment for all.

AREA 4: CONCLUSIONS

AREA 4	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle			x		

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

1. **Review the VCE curriculum:** to ensure that the learning outcomes required in the field are achieved.
2. **Consider so-called practical, cross-subject student projects** supervised by lecturers that would last for years. These projects would open up laboratories for students to use purposefully and significantly diversify the learning outcomes that can be achieved.
3. **Promote Feedback:** from students to lecturers and to the Study Programme Committee

For further improvement

1. **Review laboratory development plans:** to fully achieve LO, promote self-aware learners and allow students to use all laboratory capabilities comprehensively and, also if possible, diversify the area of use of technical materials.

AREA 5: TEACHING STAFF

5.1.	Teaching staff is adequate to achieve learning outcomes

FACTUAL SITUATION

5.1.1. The number, qualification, and competence (scientific, didactic, professional) of teaching staff is sufficient to achieve learning outcomes

Currently, the academic staff of FME and IDE consists of 23 members, of whom 19 teach study field courses and four lecturers general courses. The academic staff of the study field courses consist of seven associate professors, eleven lecturers and one assistant. The workload coefficient varies from

below 0.7 for seven members and above 0.7 for ten members of staff, two work PT hours. Six members of the academic staff have a workload coefficient above 1.0.

The VCE academic staff planned for the study field courses in the study programme consists of 24 members, seven of whom are associate professors and sixteen lecturers. The workload coefficient varies from below 0.7 for five members to above 0.7 for twelve members of staff, one of whom works PT hours. Five members of the academic staff have a workload coefficient above 1.0.

More than half of the academic staff have worked at KK for more than 3 years, with a workload greater than 0.5 FTE. A large part of the teaching staff has practical work experience in the study field, and some teaching staff are also currently practising specialists in enterprises. Teaching staff who are appointed as associate professors conduct applied research in the field of Production and Manufacturing Engineering.

Academic staff's employment contracts are for five years. After each five-year cycle, an attestation is carried out to determine the compliance of the staff's research and pedagogical qualifications. The main criteria for the assessment are participation in conferences, the number of published scientific articles, conducting research projects, compiling methodological material, supervising research, and other related research.

ANALYSIS AND CONCLUSION (regarding 5.1.)

There are sufficient qualified lecturers and associate professors to successfully teach the study programme. In addition to academic competence, lecturers also have real practical experience working as practising specialists in enterprises. Applied research is conducted, and there is reason to believe that the results will be used to illustrate study course materials. An academic staff attestation system has been implemented, and it is sustainable. The risks include academic staff members who have workloads exceeding 1.0 and, in individual cases, the number of contact teaching hours is too high, which may inhibit lecturer participation in development activities.

5.2.	Teaching staff is ensured opportunities to develop competences, and they are periodically evaluated

FACTUAL SITUATION

5.2.1. Opportunities for academic mobility of teaching staff are ensured

KK academic staff have the opportunity to participate in several international mobility programmes such as ERASMUS+ and NORDPLUS. The opportunity to participate and confirmed participants are announced four times a year. The rules and requirements for participation are clear and public and listed in the *Description of the procedure for organising mobility of KK staff under international exchange programmes*. The Staff Selection Board makes the decision, and if a staff member is not satisfied with the result of the decision, he or she has the right to file a complaint within 2 days.

The main objectives of mobility programmes are to teach, participate in training, and do internships at other higher education institutions or business enterprises.

Several such foreign visits have taken place in recent years. However, incoming visits have not been carried out to the same extent.

5.2.2. Opportunities for the development of the teaching staff are ensured

Academic staff have several opportunities for professional development, taking part in courses, seminars, applied research, and participating in international projects and expert groups. KK has conducted internal training in the last three years to improve didactic and research competencies. The topics of internal training are selected according to the general training needs of academic staff.

KK conducts short courses and seminars for new lecturers to support them and shorten the induction period. The KK encourages improving qualifications through further education. However, it has sometimes become clear that the hourly workload of some academic staff member may be too high, which prevents or slows down their ability to improve their qualifications or participate in applied research.

ANALYSIS AND CONCLUSION (regarding 5.2.)

Sufficient opportunities have been created for teaching staff to develop their competencies further. The KK has conducted training to increase didactic and research competencies. Opportunities have been created to participate in international programs and projects. A period with support measures has been created for young or starting teaching staff. One possibility could be to involve more academic staff in international projects, which in turn would help expand students' knowledge.

AREA 5: CONCLUSIONS

AREA 5	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle			x		

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

1. **Consider Limiting Teachers Workload:** A workload above 1.0 would be wise to avoid if possible as it can lead to teacher overload or a stagnation of work tasks.

For further improvement

1. **Improve Teachers International Exposure:** Involving a larger number of academic staff in international projects, which in turn would contribute to greater internationalization of students.

AREA 6: LEARNING FACILITIES AND RESOURCES

6.1.	Facilities, informational and financial resources are sufficient and enable achieving learning outcomes

FACTUAL SITUATION

6.1.1. Facilities, informational and financial resources are adequate and sufficient for an effective learning process

KK provides well-equipped facilities to support the PME programmes, including modern lecture rooms with multimedia tools, internet access, and specialized software like Adobe Creative Cloud and ImosCAD. Key facilities such as the Practical Training Centre (PTC) and Advertising and Media Centre (AMC) offer industry-standard tools for manufacturing, computer graphics, and audio-visual production, with recent upgrades including wide-format printers and laser cutters. The library supports learning with over 300,000 electronic resources and international databases like Springer and EBSCO, along with virtual resources and training. Facilities are accessible to students with disabilities, featuring ergonomic workspaces and accommodations. Internships integrated with local industry partnerships provide practical experience, though there is room to expand the diversity and availability of these opportunities. KK's investments ensure a modern and effective learning environment.

6.1.2. There is continuous planning for and upgrading of resources.

KK demonstrates a systematic approach to resource planning and upgrading, incorporating feedback from stakeholders and aligning with industry trends and technological advancements. Recent upgrades include renovated computer labs, acquisition of advanced tools like the TQC SP0015 surface hardness test kit and ESKO Graphics software, and the establishment of a Materials Research Laboratory. Planned future purchases, such as a CNC machining center, tribometer, and UV printing machine, reflect the institution's commitment to maintaining a cutting-edge learning environment. However, there is still a need for more specialized equipment in emerging technologies and further development of internship facilities to ensure comprehensive alignment with industry demands and student needs.

ANALYSIS AND CONCLUSION (regarding 6.1.)

KK has successfully developed infrastructure and resources that support the educational needs of its PME students through well-equipped laboratories, a robust library, and strong industry partnerships. Continuous upgrades, such as recent investments in laboratory tools and plans for acquiring advanced equipment like a CNC machining center and UV printing machine, reflect KK's forward-thinking approach and alignment with industry standards. However, limitations remain in the availability of internship placements in highly specialized fields, and long-term funding for resource upgrades may present challenges. Additionally, the lack of alignment between some equipment and rapidly evolving industry needs raises concerns about the institution's ability to maintain relevance and competitiveness in the future. While current facilities meet learning objectives, addressing these gaps is critical for sustaining the programme's quality and adaptability. In particular, regarding to VCE programme, where the current laboratory equipment is not fully supporting all programme learning outcomes.

AREA 6: CONCLUSIONS

AREA 6	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle			X		

COMMENDATIONS

1. **Comprehensive Library and Digital Resources**: KK's library supports student research and learning with substantial access to both print and electronic resources, including prominent academic databases. The institution also provides training on information literacy, enabling students to make full use of these resources for their academic and professional development.

RECOMMENDATIONS

To address shortcomings

1. **Enhance Equipment Diversity to Match Industry Developments**: While KK's facilities cover essential industry needs, expanding the range of equipment to include newer technologies in production and manufacturing would provide students with broader exposure to current industry standards, in particular to address the needs of VCE program.
2. **Expand Internship Partnerships for Broader Opportunities**: Internship opportunities are limited in certain specialized fields, which restricts students' access to hands-on, real-world experience relevant to their studies.
3. **Establish a Sustainable Financial Plan for Long-Term Resource Maintenance**: Although KK is proactive in upgrading facilities, there appears to be some uncertainty about securing long-term financial resources for future upgrades.

For further improvement

1. **Introduce Monitoring of Internship Quality and Relevance**: While KK has established internship partnerships, regular monitoring and feedback mechanisms would help maintain alignment between internship experiences and academic goals.

AREA 7: QUALITY ASSURANCE AND PUBLIC INFORMATION

7.1.	The development of the field of study is based on an internal quality assurance system involving all stakeholders and continuous monitoring, transparency and public information

FACTUAL SITUATION

7.1.1. Internal quality assurance system for the programmes is effective

Internal study quality assurance at the College is regulated by the "Kaunas College Quality Manual". This internal quality assurance system combines a wide spectrum and is focused on the quality of study programs, study subjects, management, personnel, and material resources. The College also relies on the quality assurance provisions of the European Higher Education Area, the Law of the Republic of Lithuania on Science and Studies, the statute of Kaunas College, the policy of studies and applied science and art activities of Kaunas College and human resources policy of Kaunas College.

During the meeting with the administration of the higher education institution and the employees confirmed the implementation of the quality assurance activities. They also noted that feedback reports are collected systematically and according to the established systematics: alumni, students, employers and other interested groups.

However, the number of students enrolled in the VCE programme the first year of implementation are low and this can be attributed to a lack of analysis to the quality assurance reports and/or improper preparation and marketing of the VCE study programme by the Study Program Committee.

In the SER it is mentioned and it was mentioned as well during the visit that on the College's website there is the section "You said - we did it", all of which shows the students to see the improvement in the directions they have expressed are indeed being implemented, while being guided by the aspect of continuous improvement.
It is noted in the SER that the quality implementation of the study programmes is ensured by applying various methods and measures - once a month the Department of Industrial Engineering and Robotics meets, the Study Field Committee plans to submit proposals for the improvement of the study programmes, and the need to update the study programmes are assessed every year.

7.1.2. Involvement of stakeholders (students and others) in internal quality assurance is effective

According to the SER the internal quality assurance system includes an annual quality assessment of study programs. Qualitative indicators are shown by the following criteria: quality of study subjects (modules), feedback from students, social partners, employers, quality of training of graduates, etc. All this was confirmed during the meeting with the administration and it was noted that the previously mentioned groups of social stakeholders are surveyed, according to a predetermined plan, and the results are used by the Dean's office to ensure the quality management of studies. During the visit it was mentioned that alumni participation was low.
Taking into account the recommendations, updates are implemented that are publicly available to students and the public, which shows that students as well as social partners are involved and directly contribute to quality assurance.
Surveys of graduates and social partners in the labor market are planned, but during the meeting with the companies, it was confirmed that they participated mostly providing direct feedback to the internship’s supervisor, but they participated less through surveys.
The ongoing survey was not confirmed during the meeting with the social partners. The social partners stated that they do not participate in activities at the higher education institution, but only accept students for internships, but they would like to participate and believe that it would be appropriate to include them in the activities of updating and improving the study content, events, public theses defenses, or even in the governance structure of Kaunas College.

7.1.3. Information on the programmes, their external evaluation, improvement processes, and outcomes is collected, used and made publicly available

The self-assessment of studies in the SF PME relies on collecting data from academic performance, student mobility rates, project activity outcomes, participation in national and international events, and insights from other institutions with similar programs. The Department of IER also gathers data covering academic staff qualifications, scientific and consulting activities, achievement of learning outcomes, student attrition rates, graduate employability, and alumni activities.

Evaluation methods include surveys, document analysis, and discussions, with quality indicators such as programme quality, stakeholder feedback, and graduate preparedness. Data are regularly analyzed and presented in meetings of the Department, Study Field Committee (SFC), and Dean's Office. Annual reports and action plans address student performance, expectations, internships, and stakeholder involvement.

Information is managed through systems like Activity Planning Information System and Study Management System, and annual performance indicators are published in the KK Document Catalogue. Additional data is stored in resolutions, progress reports, schedules, and cooperation agreements, ensuring effective monitoring of the study process. Finally, programmes descriptions, survey results, and career opportunities are publicly available on the KK website.

7.1.4. Student feedback is collected and analysed

KK conducts biannual student surveys on teaching quality and course content via the Study Management System (SMS), allowing anonymous feedback after course completion. Feedback is shared with faculty and administration and informs the PME Study Field Committee. First-year students are also surveyed annually about their study motivations and adaptation experiences, while senior students assess overall study quality. Results are discussed in institutional meetings.

Student ratings of SF PME programmes are consistently high. From 2021 to 2023, course quality received an average score of 4.63 out of 5, up from 4.28 in 2020-2021. For Furniture Manufacturing Engineering, content quality scored 4.8 in 2021/2022 (4.5 in 2020/2021), with teaching quality rated at 4.9 (up from 4.3). Industrial Design Engineering scores rose from 4.15 in 2020/2021 to 4.4 in 2021/2022.

ANALYSIS AND CONCLUSION (regarding 7.1.)

The institution's internal quality assurance system integrates a comprehensive approach, focusing on the quality of study programmes, courses, management, staff, and resources. A feedback survey is regularly conducted, with its results analyzed, and the implemented solutions made accessible to students and the public.

AREA 7: CONCLUSIONS

AREA 7	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
First cycle			x		

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

1. **Increase Social Partners involvement:** It is suggested to cooperate more closely with social partners by including them in the Study Programme Committee, organizing days of social partners where best practices would be shared. Also, their experience would be useful in involving them in governing bodies, such as the academic council.
2. **Increase the preparation and marketing activities of VCE Study Program.** It is suggested to increase the marketing activities of the Study Programme Committee to increase the students enrolled in the programme.

For further improvement

None

V. SUMMARY

The study programs in Furniture Manufacturing Engineering (FME), Industrial Design Engineering (IDE), and Visual Communication Engineering (VCE) reflect a strategic focus on addressing labor market demands, with FME being particularly noteworthy as the only such programme in Lithuania. Both FME and IDE are highly relevant to the needs of the Kaunas region, offering significant potential to support local industry growth. However, the VCE programme faces critical challenges, including a misalignment between its programme name, learning outcomes, and industry needs, which risks misleading prospective students and reducing its appeal. Additionally, the programme lacks alignment with the broader engineering competencies outlined in the Engineering description, particularly regarding interdisciplinary problem-solving and commercial engineering activities. Addressing these gaps could enhance the programme's relevance and demand.

KK has created sufficient opportunities for students to acquire the necessary learning outcomes. The study programmes are balanced and have sufficient qualified lecturers and associate professors covering the theoretical topics and practical skills necessary. Additionally, lecturers have practical experience working as specialists in enterprises. Teaching staff participates KK conducted didactic and research competencies training and has sufficient opportunities
to develop their competencies further.

KK integrates applied research into its Production and Manufacturing Engineering programmes, aligning with industry trends and technological advancements. Faculty research enriches the curriculum, and students gain practical experience through collaborative projects and conferences. Expanding research opportunities, modernizing equipment, and strengthening international collaborations would further enhance the programme’s impact.

KK provides well-equipped facilities, including modern laboratories, specialized software, and a robust library with extensive digital resources. Strong industry partnerships support practical training, while continuous upgrades, such as investments in advanced equipment, align with industry standards. However, expanding internship opportunities, enhancing equipment diversity, and ensuring sustainable long-term funding for resource upgrades are essential for maintaining the programme’s quality and relevance.

Kaunas College excels in transparency and supports students, but there is room for improvement in motivating students for long-term study abroad and enhancing the process for recognizing prior learning outcomes from foreign qualifications. By addressing these areas, the College can further enhance its appeal and support for students.

The self-assessment process for the SF PME at Kaunas College demonstrates a comprehensive approach to quality assurance, leveraging diverse data sources such as academic performance, mobility rates, project outcomes, and stakeholder feedback. Strengths include the integration of multiple evaluation methods – surveys, document analysis, discussions, the regular analysis and presentation of findings in departmental and committee meetings. Transparent information management through systems like the Activity Planning Information System and Study Management System, along with the public availability of key documents and results, reflects strong organizational practices. However, the process could benefit from more proactive stakeholder engagement, especially alumni and employers, to enhance the feedback loop and ensure continuous programme relevance and improvement.