STUDIJŲ KOKYBĖS VERTINIMO CENTRAS
CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

SOFTWARE ENGINEERING FIELD OF STUDY

at SMK Aukštoji mokykla

EXTERNAL EVALUATION REPORT

Expert panel:

1. Panel chair: FH-Prof. Mag. DI Dr. Friedrich Praus ……..
   (signature)
2. Academic member: Prof. (FH) Dr. Johannes Lüthi
3. Academic member: Asist. Prof. Roman Danel
4. Social partner representative: Vilma Narkevičienė
5. Student representative: Matas Zaloga

SKVC coordinator: Gabrielė Čėplaitė

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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: FH-Prof. Mag. DI Dr. Friedrich Praus, Professor at Vienna University of Applied Sciences (FH Technikum Wien);
2. Academic member: Prof. (FH) Dr. Johannes Lüthi, Professor and former Head of the Academic Council at the Kufstein University of Applied Sciences (FH Kufstein);
3. Academic member: Asist. Prof. Roman Danel, Assistant Professor at Institute of Technology and Business in České Budějovice (VŠTE in České Budějovice), Assistant Professor at Technical University of Ostrava (VŠB);
4. Social partner representative: Vilma Narkevičienė, IT Function Owner, UAB Hyand Lithuania;
5. Student representative: Matas Zaloga, Third-year student of the first-cycle study program "Computer Software Engineering" at Vilnius Gediminas Technical University, member of the Lithuanian Students' Union.

1.3. SITE VISIT

The site visit was organised on 25 February 2025 on-site.

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 nearly no need for translation and the meetings were conducted in English. The translator was present for occasional cases when additional clarification was required in Lithuanian.

1.4. BACKGROUND OF THE REVIEW

Overview of the HEI

SMK Aukštoji mokykla (SMK) is the largest non-state higher education in Lithuania. It has operated since 1994 in Klaipėda, since 1999 in Vilnius and since 2018 in Kaunas. SMK has around 4230 students from Lithuania and 139 foreign students, 263 teachers, including 54 with a doctorate degree. SMK has had more than 12000 graduates.

SMK implements 23 study programmes in 13 study fields (Informatics, Nursing and Midwifery, Design, Cosmetology, Law, Management, Business, Communication, Finance, Tourism and Recreation, Marketing, Software Engineering, Media Art). 4 study programmes are implemented in English (International Business, Marketing and Advertising Creation; Programming and Multimedia; General Practice Nursing; Video Creation and Media).

Overview of the study field

The HEI offers 3 programmes in the study field of Software Engineering: The Programming and Multimedia awards a professional bachelor's degree, while the Programming and the Software Testing program grant professional qualifications, both producing highly valued specialists.

The HEI Study Programmes in Software Engineering align with European and Lithuanian trends of increasing internationalization and competitiveness in IT. These programs support national development goals, addressing the growing demand for Software Engineering specialists as outlined in key Lithuanian strategic documents. Policies like Lithuania 2030, the National Progress Plan 2030, and the AI Strategy emphasize the significance of digitization, innovation, and modern IT infrastructure in shaping the country’s future.

Previous external evaluations

The Programming and Multimedia program has been implemented in the Vilnius Branch and the Klaipėda Department in 2004, in the Kaunas Branch in 2018. In 2014 the study program was accredited in the Vilnius branch for a period of 3 years, in the Klaipėda branch for a period of 6 years.

Since the two level 5 study programmes have been registered in 2023, no previous external evaluations have been performed.

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
- Statistics on the proportion of funding
- Information on initiated or future projects involving the social partners that are not mentioned in the Self-Assessment
- Percentage of recruitment in each unit (Vilnius, Kaunas, Klaipėda)

- Statistics on the percentage of final thesis topics proposed by social partners

- Missing information regarding Table 14 regarding progress (in grades) of students in Software Engineering Study Field (full-time studymode)

- Teacher workload - internal SMK rules and guidelines on what is used

Additional sources of information used by the review panel:

The following additional sources of information have been used by the review panel:

- Lithuanian Progress Strategy “Lithuania 2030“;
- The Digital Europe Programme;
- Invest Lithuania https://investlithuania.com/

II. STUDY PROGRAMMES IN THE FIELD

Short cycle/LTQF 5 at SMK Aukštoji mokykla

Title of the study programme	**Programming**	**Software Testing**
State code	5701BX010	5701BX006
Type of study (college/university)	Short Studies	Short Studies
Mode of study (full time/part time) and nominal duration (in years)	Full-time, 1.5 years, Part-time, 2 years	Full-time, 1.5 years, Part-time, 2 years
Workload in ECTS	90	90
Award (degree and/or professional qualification)	Programmer qualification	Tester qualification
Language of instruction	Lithuanian	Lithuanian
Admission requirements	Secondary Education and Professional Qualification	Secondary Education and Professional Qualification
First registration date	24 11 2023	07 07 2023
Comments (including remarks on joint or interdisciplinary nature of the programme, mode of provision)	-	-

First cycle/LTQF 6

Title of the study programme	**Programming and Multimedia**	
State code	6531BX015	
Type of study (college/university)	College	
Mode of study (full time/part time) and nominal duration (in years)	Full-time, 3 years, Part-time, 4 years	
Workload in ECTS	180	
Award (degree and/or professional qualification)	Professional Bachelor in Informatics Science	
Language of instruction	Lithuanian / English	
Admission requirements	Secondary Education	
First registration date	10 06 2003	
Comments (including remarks on joint or interdisciplinary nature of the programme, mode of provision)	-	

III. ASSESSMENT IN POINTS BY CYCLE AND EVALUATION AREAS

The **short cycle** of the Software Engineering field of study is given a **positive** evaluation.

No.	Evaluation Area	Evaluation points[1*]
1.	Study aims, learning outcomes and curriculum	3
2.	Student admission and support	4
3.	Teaching and learning, student assessment, and graduate employment	4
4.	Teaching staff	4
5.	Learning facilities and resources	4
6.	Quality assurance and public information	5
	Total:	24

The **first cycle** of the Software Engineering field of study is given a **positive** evaluation.

No.	Evaluation Area	Evaluation points[2*]
1.	Study aims, learning outcomes and curriculum	3
2.	Links between scientific (or artistic) research and higher education	4
3.	Student admission and support	4
4.	Teaching and learning, student assessment, and graduate employment	4
5.	Teaching staff	4
6.	Learning facilities and resources	4
7.	Quality assurance and public information	5
	Total:	28

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.

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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

The SMK Aukštoji mokykla (hereinafter referred to as "HEI" or "SMK") Software Engineering study field programs, particularly software development, testing and multimedia are designed to be highly relevant to both the local and global labor markets, aligning with strategic goals outlined in key Lithuanian and European strategic documents, such as Lithuanian Progress Strategy "Lithuania 2030" and the Digital Europe Programme. The SER highlights Lithuania's key strategic frameworks to demonstrate that the learning outcomes of the HEI's programmes align with long-term national objectives, such as sustainable economic growth supported through innovation, digital infrastructure, advanced information and communication technology (hereinafter referred to as "ICT") skills and the promotion of artificial intelligence (hereinafter "AI"), cybersecurity and Internet of Things (hereinafter referred to as "IoT").

SMK integrates study programmes as mentioned in the SER such as Programming and Multimedia and Software Testing that directly support national digitization efforts and equip students with relevant technological skills. These programmes are designed to meet the growing demand for ICT specialists, driven by digital transformation in areas such as AI, cybersecurity, and software development. To ensure alignment with current and future needs, the institution conducts continuous labour market research as referenced in SER (Study on Professional Need for the Specialists in Software Engineering Study Field carried out by HEI in 2023) by analysing national and international strategic documents, economic indicators and expert opinions.

The HEI considers STRATA reports while preparing study programmes that highlight general abilities' needs such as analytical thinking, communication, collaboration, creativity, problem-solving, managerial skills and industry specific expertise that are and will be highly demanded in the future of ICT market. Reacting to the recommendations of SKVC experts and the needs of the labour market, the Programming and Multimedia Study Programme (hereinafter referred to as "PRM SP") study plan was updated to include course units that are directly related to or complement the multimedia focus of the programme. Specifically, the teaching of numerical methods was replaced with research and design based methods that promote active and creative student work, strengthen problem-solving skills and support the development of original solutions through activities such as creative multimedia projects, case studies, laboratory work, collective creation and cooperation with companies.

HEI's programmes are correlated to national and international priorities focused on digital transformation and technological innovation. The rapid advancement of digital technologies, driven by the Covid-19 pandemic has intensified the need for skilled professionals, particularly in ICT fields. HEI's programmes in Programming, Software Testing, and Multimedia directly address this demand, ensuring students are equipped with the relevant skills for the digital economy. The

inclusion of emerging technologies like artificial intelligence, augmented reality and interactive multimedia in the curriculum supports the alignment with industry trends in sectors such as medicine, education, advertising and finance.

Surveys and reports, such as described in SER "Opinion of graduates from Software Engineering Study Field and employers on the skills and knowledge acquired by SMK students", highlight a significant shortage of ICT professionals in Lithuania and beyond. HEI's programmes are designed to fill this gap, with a particular focus on highly desired roles such as software developers, testers, and multimedia experts. The emphasis on both technical expertise and general competencies like teamwork, problem-solving, and analytical thinking ensures that graduates are well prepared to meet the expectations of employers.

Software Engineering study programmes at HEI, especially the short Software Testing (hereinafter referred to as "ST SP") and Programming (hereinafter referred to as "PRO SP") programmes offer quick qualifications that meet labour market needs. This structure supports lifelong learning by enabling individuals to gain the necessary skills to advance or requalify in the continuously developing technology sector. The programmes also emphasize employability and ensure graduates are prepared for both local and international job markets.

SMK's efforts are consistent with international trends in digital technologies, with a strong focus on AI, IoT and cybersecurity - fields that are expected to see increasing demand globally. The institution's international partnerships and alignment with European strategies ensure its graduates are equipped to compete in both the local and global markets.

The programme aims and learning outcomes are well aligned with the needs of society and the labour market. SMK offers and takes initiatives to create the most diverse student experiences through the integration of top trending technologies in information technology (hereinafter referred to as "IT"). These include AI, various multimedia and graphical elements such as moving images, sound, animation, Virtual Reality (hereinafter referred to as "VR") and Augmented Reality (hereinafter referred to as "AR"). By incorporating these new technologies, HEI supports students to learn about the latest trends, improve their career chances and make them flexible workers in the changing technology world.

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

HEI's mission focuses on lifelong learning, social welfare, economic progress and social impact, and the programs aim to equip students for professional success, personal development, while supporting their social and economic growth. This reflects the values and goals in SMK's mission. HEI's mission to reveal and empower the full potential of individuals for continuous personal development and meaningful, value-driven professional activity clearly reflects its core purpose and goals. It emphasizes lifelong learning and innovation, fostering individual growth, social impact and sustainable economic progress, while promoting an open, inclusive environment that inspires positive change and collective value creation.

The learning outcomes of all three programs emphasize the development of lifelong learning competencies which is central to SMK's mission. They focus on adapting to rapidly changing information technologies, continuous professional development and critical thinking, supporting the mission's goal of fostering individuals' potential for ongoing personal and professional growth.

The HEI fosters a student-centered environment guided by core values that enhance the learning experience and align with its strategic focus. Openness, diversity and inclusion, social responsibility, community spirit and continuous improvement create a supportive, creative and socially engaged academic culture. Within this framework, study programs equip students with key competencies in software design, development, testing and the use of emerging technologies and multimedia skills that respond to the evolving needs of the software engineering field and contribute to broader societal and economic progress.

The study programs have been designed with input from social stakeholders and based on a study of the country's needs for software engineering professionals, integrating scientific knowledge and innovation with societal and economic demands. The titles of the programs (PRM SP, ST SP, PRO SP) are clearly defined and accurately represent the roles for which graduates are being prepared. These titles are understood both nationally and internationally, enhancing students' mobility and career prospects, which aligns with SMK's goal to provide open and inclusive educational opportunities.

The programs aim to build technical skills while also developing creativity, critical thinking and the ability to collaborate in multicultural environments. These outcomes are consistent with SMK's strategy to develop capable individuals who can drive societal change.

ANALYSIS AND CONCLUSION (regarding 1.1.)

The aims and learning outcomes of HEI's Software Engineering study field programs are closely aligned with both the needs of society and the labor market, as well as with the institution's mission, goals, and strategy for the 2021-2030 period. These programs are designed to equip students with a combination of technical and soft skills, ensuring their success in the digital economy. Additionally, the programs stay current with emerging technologies like AI and multimedia, preparing students for the future job market and contributing to Lithuania's digital growth.

The programs are in line with SMK's mission and goals, focusing on both career success and continuous learning. They combine technical knowledge with important personal skills, like communication and cultural awareness which are essential in today's global workplace. New programs at SMK are developed based on research, including data from organizations like the European Commission and UNESCO and feedback from social partners. This ensures the programs meet current and future job market needs. Worth mentioning, HEI has included more emphasis on cybersecurity and database management to match the industry demand.

Social partners help shape the programs by providing feedback through meetings, discussions and internships. Notably, the growing demand for multimedia skills has been included in the curriculum to better prepare students for their careers. This keeps the programs up-to-date with the latest trends in the job market. To track the success of the programs, HEI monitors employment rates and collects feedback from employers after internships. This helps make improvements to the programs, such as adjusting course content or increasing group sizes. Surveys from students also highlight areas for change.

Along with technical skills, SMK focuses on soft skills, like business communication and public speaking, to make sure graduates are well prepared for global job opportunities.The HEI supports students' language and international competencies by offering flexible study options such as English language courses and internships abroad. To further strengthen these skills, it could

introduce mandatory courses, such as IT Project Management in English, encouraging students to improve their language proficiency through practical academic experience.

SMK fosters a student-centered environment grounded in openness, inclusion, and continuous improvement. To strengthen student engagement, it would be commendable to introduce motivational tools such as recognition awards, career development workshops or performance based incentives. These strategies would align with SMK's values and existing initiatives like flexible study options and international opportunities enhancing students' motivation, academic success, and overall learning experience.

Industry professionals are involved in reviewing student theses and recommending internships, which keeps the programs aligned with what employers need. These ongoing partnerships ensure the programs stay relevant and responsive to both societal and job market changes.

SMK's Software Engineering study field programs are built to equip students with the skills they need for success in a fast-changing digital world, while also aligning with Lithuania's broader societal and economic goals.

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 programme "Programming and Multimedia" as a first cycle programme complies with the legal requirements: the total workload is 180 ECTS, 152 ECTS (minimum required is 120) are allocated to learning outcomes of the study field, 30 ECTS (minimum required 30) are allocated to internships, 9 ECTS (minimum required 9) are credits for the final thesis, there are sufficiently many contact hours, and more than 30% of the workload is allocated to independent student work.

Also the two short cycle programmes *Programming* as well as *Software Testing* comply with the legal requirements: in both short cycle programmes, the total workload is 90 ECTS, 80 ECTS (minimum required is 50) are allocated to learning outcomes of the study field, 30 ECTS are allocated to internships, there are sufficiently many contact hours, and more than 30% of the workload is allocated to independent student work.

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

Learning outcomes and programme aims are described in the SER with sufficient details. The learning outcomes are adequate and comply with the aim and objectives of the study program. In order to turn the foreseen learning outcomes of the Study Programmes and course units into achievements of a student, diverse and modern teaching (learning) and assessment methods are chosen. Examples of teaching methods used in lectures: interactive lecture, discussion, simulation, brainstorming, laboratory works, seminars. Examples of study methods used in practical activities: task solving, analysis of practical situations, creative multimedia projects; case studies, collective

creation; cooperation with companies. Study is completed by preparation and defence of Applied Project that help evaluate general abilities of a student as well as subject-specific ones. Learning outcomes are built in compliance with Bloom's taxonomy of knowledge.

A document about usage of AI tools by students (within study and at final theses) was published a year ago. During an interview with school representatives, it was stated that teachers have freedom in using AI and it is up to them to decide to what extent and how students can use AI tools. The school's strategy for students is to use AI in an ethical manner.

Learning methods that encourage student analytical and critical thinking are also used during lectures (discussions, project activities, case studies, self-evaluation, evaluation of team members, learning from mistakes…).

The HEI analyzes feedback from students regarding the quality of teaching, survey per semester each lecture. In the interview it was explained that this is followed by a meeting with teachers and, if necessary, adjustments to the teaching in the study program can be implemented. There are documents for managing the quality of teaching and processing student feedback on teaching.

The interviews revealed a high level of consistency in the pedagogical process (coherent team, harmony between participating parties), which is a positive prerequisite for ensuring quality and continuous improvement.

1.2.3 Curriculum ensures consistent development of student competences

The curriculum is well and clearly described in the SER with details provided in the appendices. Students do internships in real conditions in business companies in the sector of information and communication technologies foreseen in the plan of the Study Programme: teaching and final internships of professional activity (in volume of 32 credits). For students, who study in part-time study mode, a lot of attention is paid to the transfer of practical knowledge that the students could integrate in their professional activities (30 credits are allocated to internships of professional activity). The balance of credit distribution in part-time study by semesters helps maintain a consistent load of studies.

Student feedback on teaching is provided every semester. The school supports students participation in conferences, Erasmus exchanges, and participation in BIP (including credit recognition). Students can also optionally choose a subject taught in English.

Students are asked about their expectations of the course and when the course is over, an evaluation survey is done. A list of optional course units is approved by the Order of the SMK Director every academic year, taking into account both the latest changes in the labour market and student needs.

The interview confirms personalisation features of the study by selectable subjects. Optional subject focused on leadership in science is available.

The school places a high emphasis on teaching soft skills (including public speaking and communication). This was also confirmed during the interview with social partners. There is also support for students to take part in internships and lectures provided by company representatives. This allows students to develop additional skills (contact with new technologies, understanding backgrounds of real software developing, analytical skills).

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

Students of the Software Engineering Study Field programs have the opportunity to individualize their studies by choosing optional course units for interdisciplinary studies and for the development of general competences (12 ECTS for study level 6, 10 ECTS for study level 5).

Besides, students also have a possibility to choose course units from given alternatives. Programming and Multimedia students may choose: IT Project Management or IT Project Management in English; Programming with .NET or Programming with a selected language; Game Development for Smart Devices or Augmented and Virtual Reality Technologies; Programming with Python or Programming with Java. Software Testing students may choose Python Object Programming or Java Object Programming. Programming students may choose System Design and Testing or Software System Engineering; IT project Management or IT Project Management (in English).

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

The HEI ensures that the preparation, submission, defense, and evaluation of final theses (study level 6, 10 ECTS) and applied projects (study level 5, 5 ECTS) comply with the Republic of Lithuania Law on Science and Studies. SMK provides detailed requirements in documentation (Methodological Instructions for Final Theses) as well as academic support by the supervisor and head of the study programme.

The process of final thesis preparation consists of various stages. First, the topic is offered to the students, eventually coming from social partners. Then the head of the study programme appoints a supervisor.

The student begins by preparing a final thesis/applied project plan, which outlines the topic's relevance, objectives, tasks, and research methods. After review and possible adjustment with the supervisor, the student proceeds to develop the thesis in stages, including methodology, conducting research, drawing conclusions, and offering improvement suggestions.

The head of the study programme conducts monthly training to support students in preparing their final thesis/applied project, covering key topics such as literature analysis, research methodology, empirical work, and presentation preparation. These sessions are scheduled in advance and integrated into students' timetables for easy access and participation.

Students regularly meet with their supervisors several times per month, following both a general preparation schedule and an individually agreed timetable. Each meeting is documented in a preparation report, which tracks the student's progress and highlights areas for improvement, ensuring continuous guidance and quality development of the thesis/project.

The head of the study programme oversees the coordination of students' Professional Bachelor Final Theses and Applied Projects in the Software Systems Study Field, ensuring alignment with the HEI's General Requirements for Final Theses and Applied Projects.

During the preparatory defense, the student's final thesis is reviewed in a collegial setting involving the student, their thesis supervisor, and study programme lecturers. If any deficiencies are identified, the student is informed and given a deadline to make the necessary improvements.

Following the preparatory defense, a reviewer for the Final Thesis is appointed. The reviewer, who must hold at least a master's degree and have a minimum of three years of professional experience in the relevant field, may be a practitioner or a higher education teacher. The reviewer evaluates the quality of the research, its practical relevance, the connection between the scientific literature and the conducted research, and the alignment of the thesis with its chosen topic.

Finally, the public defense takes place, where at least 3 representatives of social partners as well as an academic committee assess the work.

In their final theses, students explore a wide range of applied topics, including the development of internal activity tracking systems, online filtering tools, websites and webpages, as well as projects in 3D engine creation, game development, and 3D animation film production. These topics reflect the practical orientation and technological diversity of the study programme.

The average evaluation of the final thesis in the Software Engineering Study Field is approximately 8 (good). Besides, each academic year 3-5 Final Theses are prepared on the order of social partners. In future it is planned to have more topics coming from internships to have an even stronger relation to social partners.

ANALYSIS AND CONCLUSION (regarding 1.2.)

The aims and learning outcomes of the SMK Software Engineering Study Programmes align with societal and labor market needs. They also reflect SMK's mission, strategic goals, and legal requirements.

All programmes that are offered in the study field comply with the legal regulations.

The learning objectives, outcomes, teaching methods, and assessment approaches are well-integrated, ensuring a coherent development of students competencies with emphasis on soft skills and critical thinking. Updates to the study programme according to the market and students needs seem to be easy to implement, there are procedures to evaluate students' feedback toward the quality of teaching. Courses can be updated yearly.

Additionally, students of all programmes in the Software Engineering field have the opportunity to customize their study structure by selecting alternative course units, including those available in English to meet their individual learning goals. The academic councils and committees ensure high standards, and giving students the freedom to personalize their schedules helps them balance learning with work. To improve practical learning, more funding and support from social partners for joint projects could give students even more real-world experience.

High attention is given to the use of AI tools for teachers and students. The school is aware of the importance of this issue and is trying to define a framework for the effective use of these tools.

Final theses comply with the requirements for the field and cycle. Since final projects in the study level 5 programmes have not yet been implemented, no data is available.

All recommendations from the previous evaluation of the Programming and Multimedia programme were addressed.

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
Short cycle				X	
First cycle				X	

COMMENDATIONS

1. Participation in two European funded projects shows HEI's success in securing external funding, promoting international collaboration and supporting program development.

2. HEI's emphasis on soft skills helps students develop interpersonal abilities needed for workplace success. Other HEIs could benefit from adopting this approach.

3. Including multimedia in Software Engineering study field programs has been positively received, improving students' visual technical skills.

4. Excellent communication and collaboration with social partners, including company juries and competition participation strengthens SMK's industry ties and enhances program relevance.

5. Including English language courses in all programs, HEI prepares students for global job markets, improving employability rate.

6. Modern communication means to students using social media channels keeps students informed and engaged, enhancing their learning experience.

7. Encouraging students to join activities like research and meetings along with offering financial incentives, helps keep students motivated.

8. Allowing students to personalize their schedules supports diverse learning and work needs, leading to greater academic success.

RECOMMENDATIONS

For further improvement

1. The HEI could consider introducing certain courses within the evaluated programmes in English as a mandatory component, such as IT Project Management, to actively encourage students to enhance their language skills in a practical way.

2. The HEI has a great opportunity to increase student engagement by considering introducing awards, career workshops or performance initiatives to encourage students and improve their success

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

Strengthening of scientific activity is one of the HEI's strategic fields in 2021-2025. Indicators include the number of scientific articles in peer-reviewed publications and international databases, the number of scientific events and their dissemination, the number of researchers, the number of ordered research, the number of joint scientific applied activities with foreign scientists.

At the strategic level, scientific applied research at the HEI is guided by a five-year plan and detailed annually. The approved research fields—updated in 2021, 2023, and 2024—reflect evolving priorities and include Management Transformations and Educational Technologies, Life Quality Improvement, Digital Technologies, Design and Media Art Interaction, and Creation of a Legal Society. In 2023 the HEI additionally established the positions of scientific researchers.

In 2023 around 13,8% and in 2024 around 20,5% of funding came from incentive public funding for scientific, research and development (R&D) and artistic achievements or other sources of funding attracted to finance projects (competitive funding, Lithuanian and EU funding sources and instruments). Between 2021 and 2023, the HEI stood out as the leading private HEI in Lithuania in terms of R&D funding, receiving the highest allocation from the Ministry of Education, Science and Sports of the Republic of Lithuania.

In 2022 the HEI was awarded 198.72 points (5 place among 18 colleges) for the publications in the "Vieversys" system of the Research Council of Lithuania, while in 2021 it was 119.02 points (the 6th place), in 2020 - only 4 points. In total, 83 scientific publications and 9 art activities were published from 2020-2024, the topics covering e.g. adapted education during the COVID-19 pandemic or (e-) learning environments.

From 2020-2024 the HEI has prepared and implemented 33 projects, including 9 SRED projects, 17 national projects and 7 international projects.

The HEI's teachers are actively involved in scientific applied activities, conducting research, publishing articles, and presenting at national and international conferences, while also engaging in consulting. Their research efforts are purposefully aligned with the content of the course units they teach, ensuring strong links between academic instruction and scientific inquiry. Besides, the inclusion of art in the learning process is emphasized. Teachers in Software Engineering often include nationally recognized artists to enrich the educational experience.

Teachers and students in the Software Engineering Study Field actively participate in projects (e.g. Escape rooms "Business Labyrinths", Artificial Intelligence Class, Business Accelerator) funded by the Klaipėda City Municipality.

Besides, 36 conferences and forums were organized during the analyzed period, with the participation of more than 158320 participants. The topics included robotics, digitization and artificial intelligence.

The Baltic Digital Innovation Centre was founded in 2019 through a partnership involving the HEI and 11 other organizations. With €5.47 million in funding approved in 2020, construction began in 2022 on a 2000 sq. m. facility equipped with state-of-the-art labs for technologies such as 3D printing, robotics, digital design, and AI. The centre aims to support technological development and innovation, particularly in industrial and maritime sectors, by providing expert services and fostering startups. The HEI's involvement enhances its collaboration with digital companies, enriches student career opportunities, and supports cutting-edge research and business projects.

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

Teacher shares the knowledge based on close cooperation with social partners which enables them to react quickly to the changes in the area of IT. Teachers also participate in trainings and seminars organized by social partners.

The study content is related to the latest achievements in science, art and technologies through involvement of students in practical and project tasks, applied research and final thesis led by social partners (e.g. development of web page or mobile applications is mentioned in the SER).

The SMK teachers actively encourage students during lectures and when carrying out independent or practical work tasks to use the databases subscribed by SMK (EBSCO, Taylor & Francis…). The level of technical equipment in the classrooms corresponds to the current state of IT. The SMK participates in the national associations that help get acquainted with the latest trends, innovations etc. in the areas of business, informatics and innovations. Since 2024, SMK is a member of the Artificial Intelligence Association of the Republic of Lithuania and is also an active member of LiMA (Lithuanian Marketing Association). SMK participates in the activities of international associations and is a member of the Lithuanian College Directors' Conference, belongs to the network of the European Association of Institutions in Higher Education (EURASHE). SMK is developing a European University Alliance with 12 applied research universities from eleven EU countries.

Participate of students in lectures provided by social partners, when students get acquainted with the workplaces and the peculiarities of work of social partners and IT innovations.

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

The primary ways students get involved in research activities includes authoring their thesis, using scientific paper databases, external visits to social partners, and occasional opportunities in the context of publication activities. Participation of students in competitions such as e.g. "The Young Scientist", or presentation of results from final thesis research activities at national and international conferences is encouraged by lecturers. Opportunities to engage in more practical development activities exist in the form of joint projects organized by the HEI in collaboration with social partners. For example, SMK, in cooperation with the Lithuanian association of hotels and restaurants, has participated in more than 150 business challenges. In these challenges, students of different study fields (including the software engineering study field) have solved real business tasks and practical simulations. Another example of this type of cooperation with business partners is an interactive map leading to exceptional dishes available in Vilnius Old Town,or a historical game that lets users find historical secrets in Vilnius Old Town hotels.

ANALYSIS AND CONCLUSION (regarding 2.1.)

Scientific, applied, and artistic activities play a crucial role in ensuring high-quality studies at the HEI, contributing to the development of study content and implementation processes. These activities are systematically planned and managed, with approved research fields, established scientific groups, clear performance indicators in annual planning, and an active incentive system. This structured approach fosters academic community engagement in applied research and ensures in a well evidenced way that the level of scientific and artistic activities at the HEI is sufficient.

The continuous implementation of applied research, collaboration between teachers and social partners, access to subscribed databases, availability of the latest scientific and methodological literature, evidence of partnerships with companies, and active participation in local and international associations all confirm that the study content aligns with the latest advancements in science, art, and technology.

Standard components of academic teaching and learning that provide opportunities for students to get involved in scientific research are authoring a thesis, getting in touch with scientific databases, or external visits to social partners. At the HEI , additional opportunities to actively participate in the actual research work (i.e. contribute to ongoing research projects) and/or co-author scientific papers with lecturers do exist but seem to be rather rare occasions. On the other hand, there is a strong involvement in student conferences (around 35% of the students take part) and the HEI scientific journal allows joint papers with students.

No recommendations have been given in the previous evaluation of the Programming and Multimedia programme.

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. Scientific activity is one of SMK's strategic fields.
2. The HEI and lecturers are encouraged to continue helping their students participate in competitions and conferences.
3. SMK's high employment rate and strong connection to social partners ensure graduates meet industry needs and are well prepared for the market.

4. A wide range of internship options gives students ample opportunities to gain experience and build their professional networks.

5. Transparent communication with social partners ensures a well-managed relationship that benefits both students and industry partners.

6. The participation rate of students in scientific conferences is high and should be kept at this good level.

RECOMMENDATIONS

For further improvement

1. The fraction of lecturers who are actively working on research projects has some potential to be increased. Consequently, the opportunities for students to get involved in research activities also may be subject to improvements.

2. The number of opportunities for students to actually participate in ongoing research projects may be increased. Transfer of R&D results into regular courses could be strengthened.

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

Admission to the first cycle studies is carried out through the national Lithuanian higher education admission system LAMA BPO. The specific admission criteria and process are outlined on the HEI's website. The motivational interview is a key component of the competitive score structure for the Study Programme in Software Engineering (B03) at SMK, implemented in 2019. It assesses applicants' attitudes, intentions, knowledge, and abilities related to their chosen study field, providing a holistic evaluation beyond academic performance. The motivational interview is integrated with maturity examinations and course units and additional points are awarded for achievements in Olympiads and competitions. This ensures a fair and comprehensive selection process that identifies motivated and committed students who are well-suited for the demands of software engineering studies.

From 2020 to 2023, admissions occurred at the SMK Kaunas, and Vilnius Branches with each location admitting one group of students annually. The number of applicants and their competitive scores varied, with trends showing an increase in both the highest and lowest scores over the years. The admission process remains consistent across full-time and part-time modes and the overall competitive scores reflect a stable yet competitive environment for prospective students in the Software Engineering Study Field.

Detailed data is provided on the application and acceptance rates, as well as the competitive scores of admitted students for the Software Engineering program. It includes application statistics, acceptance rates and entry scores from 2020 to 2023. Data is shown for both the full-time study program (PRM SP) and the English-language group (PRM SP ENG). This makes it easy to track trends and assess student performance. The acceptance rate is measured by the number of applicants per study place. This indicator shows how competitive the program is. For example, in the PRM SP program, the rate was 4.72 in 2022. It dropped to 2.52 in 2023. These numbers show how interest and competition levels change over time.

Competitive scores are also tracked. They contain the highest, lowest, and average entry scores each year. In the PRM SP program, the highest score was 9.59 in 2023. The lowest scores ranged from 1.81 in 2021 to 2.29 in 2022. The average score varied from 4.31 to 4.74. These scores reflect the academic level of the admitted students. The PRM SP ENG group began in 2023. It had a strong first year with an average score of 7.92. The highest was 10, and the lowest was 2.84.

According to SER, in 2022 13 HEI students applied for full-time studies in English in the field out of which 9 were admitted, compared to the program in Lithuanian, 115 students applied out of which 29 were admitted. In 2023 8 HEI students applied for full-time studies in English in the field out of which 5 were admitted, compared to the program in Lithuanian, 160 students applied out of which 87 were admitted. The low admission rates for programs in Lithuanian is likely due to the majority of applicants choosing SMK as a non-first priority in the LAMA BPO application system. No data is provided for the year 2024 and onwards.

The competitive score is calculated using a national system. It includes school grades, exam results, and other achievements. Extra points can be added if the applicant meets certain conditions. This process follows clear and legal rules. It ensures that everyone is treated fairly. All information is made public through official channels. This helps applicants understand the process and prepare better.

Overall, the admission system at SMK Vilnius is fair and transparent. It follows the law and uses a clear scoring system. This creates a competitive and trustworthy environment for new students.

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

The recognition process is detailed on the Moodle platform for students and the HEI website. The International Relations Office assists foreign entrants with academic recognition, and in 2023, SMK gained the authority to recognize foreign qualifications.

According to the information provided in the HEI website, the process of academic qualification recognition for foreign applicants at SMK involves submitting a single application for both admission and qualification evaluation to the desired study program, along with scanned copies of diplomas, transcript of records (ToR), and official translations if needed for languages other than Lithuanian, English or Russian. The evaluation, based on the Lisbon Recognition Convention, assesses the qualification's quality, purpose, content, scope, and learning outcomes against Lithuanian standards. The decision—full recognition, conditional recognition with additional requirements, partial recognition for specific programs, or rejection—is made within one month if all documents are complete. Appeals can be filed within 14 days if the applicant disputes the outcome. The process is free, though applicants cover document-related costs.

According to the SER, the responsibilities for handling the recognition of periods of study, especially in agreed mobility programs like Erasmus+, are clearly distributed: a separate Erasmus coordinator is responsible for this task, ensuring that the process is streamlined and efficient. The recognition process considers key elements such as subjects and the grading system abroad, which are essential for determining the suitability of applicants. Full-time cooperation with the International Relations Unit responsible for recognition further enhances the efficiency and effectiveness of this process. The HEI practices automatic recognition to a full extent after Erasmus+ mobilities, which is a significant advantage for students. Additionally, the recognition of prior formal learning is practiced, further supporting students' academic journeys. Automatic recognition also applies for certain foreign qualifications, such as European Baccalaureate diploma and higher education qualifications gained in Latvia and Estonia that were granted from 2019. Further information regarding this automatic recognition process can be found on the SKVC website.

Additionally, SMK has procedures for crediting learning outcomes from previous studies, allowing students from other institutions to transfer credits. Between 2020 and 2024, 221 students benefited from this process, including those who participated in the Erasmus+ program. Regarding recognition of informal and self-contained learning, in 2020-2024 learning outcomes have been credited to 7 out of 10 students who requested this procedure of Software Engineering Study Field. This means there have been instances where the university does not recognize foreign subjects, indicating a potential area for improvement. SMK collaborates with various foreign institutions to facilitate student exchanges. Overall, the recognition procedures at SMK are functioning effectively, with clear information provided to students, ensuring a high-quality process.

ANALYSIS AND CONCLUSION (regarding 3.1.)

The HEI shows a clear and transparent admission process integrated with the national system, detailed public information on admission criteria and statistics, competitive admission standards maintained across the years, with fluctuations in applicant numbers and scores.

Data collection and analysis are robust, with Transcript of Records (ToR) and learning agreements being key documents. This data is analyzed and used to ensure consistency in recognition decisions, aligning with the institution's policy and regulations. The processes are inline with the institution's and the national policies and regulations.

In conclusion, SMK appears to have a well-established and effective student admission system that meets national and international standards. The HEI is able to attract a sufficient number of qualified applicants and maintain transparent and competitive selection procedures. These strengths allow this HEI to be highly competitive both: nationally and internationally.

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

SMK demonstrates a strong commitment to ensuring opportunities for student academic mobility. Currently, there are 70 full-time international students in the HEI. According to SER in the academic year 2023-2024 there were 169 students in the Vilnius branch and 51 students in the Kaunas branch. No data was provided regarding Erasmus+ internship participation. In 2020-2024 7 outgoing students of the Software Engineering Study Field participated in Erasmus+ programme. This indicates that the HEI has a significant international presence.

Applicants are well-informed about the expectations and steps in the academic mobility process through various channels, including the marketing department, social media, classrooms, and field trips to other SMK branches, such as Kaunas or Klaipėda with international students. Cultural evening events are organized to foster a more inclusive and diverse campus environment.

Student feedback mechanisms are well-established, with formal evaluations communicated through the program manager. Anonymous surveys are sent by the program manager, and feedback is collected after lectures and before courses to understand expectations. The Erasmus+ exchange program is actively promoted through emails, social media, official sites, and international days. The program is promoted during the lectures as well, and the university provides support and answers questions related to Erasmus+. After mobility, an EU questionnaire is sent regarding the experience and feedback of the mobility. The HEI's efforts to promote Erasmus+ and BIP indicate a focus on providing opportunities that include financial aid. The HEI's support for students after mobility further highlights its commitment to student support.

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

According to the SER, academic support is structured through systematic consultations on study progress, independent work, and exam preparation, facilitated by both the Department of Studies staff and Heads of Study Programmes. The Department of Studies conducts scheduled meetings (1-2 times per semester) with student group leaders to discuss attendance, progress, and academic issues, while ongoing consultations are available throughout the semester. Heads of Study Programs hold monthly meetings with students to address key study-related concerns, including final thesis topics and internship planning. First-year students receive comprehensive orientation during Introductory Week, covering study systems, learning outcomes, assessment procedures, and digital resources. Teachers provide consultations—both in-person and online—on practical tasks, independent work, and exam preparation, following a pre-approved monthly schedule.

Financial support encompasses a range of incentives. The institution offers scholarships funded by SMK and social partners, awarded for academic excellence, research, or extracurricular achievements (e.g., prizes for outstanding theses, such as the 2022 awards from Pepi Play and the Lithuanian Electronic Sports Association). Active students may receive semester-based scholarships covering 20-50% of tuition fees, contingent on academic and social engagement. Discounts include a 10% reduction for family members of students/graduates and 30% for second-degree enrollees. State-supported financial aid includes tuition reimbursements (8 PRM SP students in AY 2020-2024), state loans (52 PRM SP students in 2022-2024), and targeted support for disabled students (6 recipients in 2020-2023) and foreign individuals of Lithuanian descent (2 beneficiaries in 2020-2024).

State mechanisms, administered via the State Studies Foundation, provide tuition reimbursements, loans, and social scholarships. Psychological support includes individual counseling (advertised on SMK's website) and open seminars (e.g., on stress management, technology addiction, and harassment prevention). A dedicated Head of Emotional Well-being oversees mental health initiatives, organizing workshops on stress reduction and self-awareness tailored to student needs.

The institution also provides psychological counseling services, open seminars on mental health and well-being, and employs a dedicated Head of Emotional Well-being to address the holistic needs of the student community.

Personal support is reinforced via a structured mentorship program, where senior students assist first-year peers in academic and social adaptation. The peer mentorship program facilitates academic and social adaptation, including monthly group meetings and active communication via digital channels. Social integration is promoted through events like the annual "SMK GO" freshman camp (attracting ~300 participants), fostering community bonding and team-building skills. These measures collectively ensure a supportive transition into academic life.

3.2.3. Higher education information and student counselling are sufficient

Higher education information and student counseling at SMK are sufficient. The HEI provides comprehensive information to applicants about the expectations and steps in the process through various channels such as SMK Moodle and their website. The public information found on the websites includes but is not limited to: dates for study periods, exam sessions, summer and winter breaks as well as dates, zoom links and meeting locations for introductory lectures and orientation events. Student feedback mechanisms are present in the institution and are further described in

the section 7.1.2 of this report. Therefore, this information is sufficient for students to be acquainted with their study programs, requirements and other relevant information. This conclusion is also backed by data from the student surveys. According to the student survey mentioned in the SER, the overall satisfaction of PRM SP students with studies is 4.3 out of 5.

ANALYSIS AND CONCLUSION (regarding 3.2.)

During the site visit, the Erasmus coordinator's emphasis on soft skills and public speaking, along with human rights teaching, indicated a holistic approach to student development in SMK. The HEI's efforts to promote Erasmus+ and BIP, along with the visits during the lectures indicate a proactive approach to student counseling. The program manager's role in communicating formal evaluations and collecting feedback ensures that students are well-informed and supported throughout their academic journey.

In conclusion, SMK demonstrates a strong commitment to ensuring opportunities for student academic mobility, providing relevant, adequate, and effective support to students, and offering sufficient higher education information and student counseling. The HEI's efforts in these areas are commendable, but there is slight room for improvement, particularly in the recognition of foreign subjects or further implementing tools for students to provide feedback. By addressing these areas, SMK can further enhance its support for student academic mobility and overall student success and satisfaction.

All recommendations from the previous evaluation of the Programming and Multimedia programme were addressed.

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
Short cycle				X	
First cycle				X	

COMMENDATIONS

1. The exceptional accessibility of teachers and staff, along with the provision of many facilities for students with disabilities, demonstrates a strong commitment to inclusivity and support.

2. The HEI's approach to tackling the AI question is noteworthy, as it acknowledges the benefits of AI and integrates it into its educational framework.

3. The peer mentorship program, "SMK GO" freshman camp (~300 participants), and monthly student group meetings facilitate smooth academic and social adaptation, fostering a strong sense of community.

4. HEI supports internationalization of students through initiatives like Erasmus mobility and cultural events, creating a welcoming global learning environment.

5. Human rights teaching and student involvement in study programs are commendable aspects that foster a well-rounded and socially conscious student body.

6. Regular anonymous surveys, after-lecture feedback collection, and post-Erasmus evaluations ensure continuous improvement and responsiveness to student needs, contributing to high satisfaction rates (4.3/5 in student surveys)

7. Recognition of foreign qualifications and prior informal learning process is free of charge.

8. Offering both Lithuanian and English language courses attracts international students and enhances the diversity of the student population.

RECOMMENDATIONS

For further improvement

1. Maintain and enhance the monthly student meetings and after-lecture feedback mechanisms.

2. Increase Erasmus+ Participation. Given the positive impact of Erasmus students on the HEI's internationalization, consider strategies to increase participation in the Erasmus+ program. This could include targeted outreach, scholarship opportunities, and partnerships with international institutions.

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 HEI applies methodology of experiential teaching, where attention is paid to students who are obliged to to solve real business challenges. They are supported by teachers, who enable them to experiment, make mistakes and learn from their own mistakes.

The HEI's study regulation outlines that cumulative assessment is used to evaluate learning outcomes of course units. This approach combines different assessment components to measure various learning outcomes, based on the complexity of the course. The final assessment of a course/module is determined according to the system specified in the course's program.

At the beginning of each semester, the HEI's teachers responsible for the study programmes collaborate to organize the distribution of classroom and independent work, set dates for interim and final tests, and establish interdisciplinary connections. They also review the course content to ensure it aligns with the intended learning outcomes, while checking for logical connections between course units to prevent content duplication and overlap.

Before each semester, teachers prepare a course unit assessment system, where they plan the content and tasks for independent study, test formats and schedules, assessment methods and criteria, and the specific requirements for independent work tasks throughout the semester. Teachers together analyze the compliance of the content of the course unit with the learning outcomes foreseen to be achieved.

The HEI's study regulation ensures that the learning outcomes of a course unit are assessed in a timely manner by the teacher who delivers the course. Assessment occurs throughout the semester, including during the examination session. It is based on interim tests, with the final grade combining the results from both interim tests and the final exam. Students are expected to complete and submit interim assessment tasks as part of the cumulative assessment process during the semester.

Teachers use Moodle to e.g. provide learning material, self-check tasks, tests and a course unit assessment system.

The head of study programmes monitor the e-learning system for timely and correct presentation of the required information (independent work programme, study material, feedback, additional material, video material etc.)

Programming and Multimedia study programme students who graduate from the first cycle of HEI studies have the opportunity to continue their education in second-cycle study programs in the field of computer science at both national and international higher education institutions. To pursue second-cycle studies, graduates must meet the specific requirements outlined in the study field or

program descriptions and possess the necessary knowledge and skills for the advanced studies. Additionally, graduates may also choose to enroll in non-degree study programs.

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

SMK has implemented various initiatives to support these students, focusing on appeals processes, disability support, and student counseling.

The HEI offers comprehensive support for students with disabilities, including wheelchair accessibility, extended test times, and text readers for visually impaired students. Scholarships for students with disabilities further alleviate financial burdens, enabling them to focus on their studies. In 2020-2023 6 students with disabilities received targeted financial support. These accommodations create an inclusive environment where students with disabilities can succeed academically.

Student counseling services at SMK are comprehensive and tailored to meet the diverse needs of the student body. The HEI employs a psychologist to provide mental health support, which is crucial for students' overall well-being. The creation of a student council room and a dedicated space for Muslim students further highlights the HEI's commitment to inclusivity and cultural sensitivity.

ANALYSIS AND CONCLUSION (regarding 4.1.)

The SER mentions that level 5 studies have not yet been implemented thus presents information related to level 6 study. It is assumed by the expert panel, that processes, evaluation conditions of level 5 studies remain consistent to level 6 study programmes.

According to the SER, the teaching and learning process at the HEI is clear and well-structured. Reports from the site visit reveal that the students' needs are effectively considered and procedures communicated via e.g. the Moodle platform facilitate the achievement of expected learning outcomes.

The learning outcomes of courses, however, do not seem to be communicated transparently for the upcoming semesters, since the procedure at the HEI foresees an adaptation and coordination of course units at the beginning of each semester. It has been reported during the site visit that course contents and probably learning outcomes might be adapted by teachers frequently. While this seems to be a good practice, e.g. to include new topics, it results in students not being able to easily determine future course content. However, students have the right to ask the study programme head for the preliminary learning outcomes and there is a website with these preliminary learning outcomes.

Student counseling and support services at SMK regarding students with disabilities are tailored to meet the diverse needs for students upon request to accommodate their needs. These services are adequate and create an inclusive environment where students with disabilities can succeed academically.

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 HEI carries out monitoring of study progress of students at the following levels: Departments of studies for e.g. progress monitoring and study surveys, head of study programme for e.g. monthly meetings with students and a deeper monitoring of progress, teachers for e.g. monitoring student achievements and students themselves for e.g. their study progress.

Monitoring is systematically planned at various stages (e.g. monitoring of student attendance, monitoring of assessments of interim tests, consultations of students with a pre-agreed schedule).

Teachers provide students with both oral and written feedback throughout the semester, during lectures and consultations. This feedback highlights the strengths and weaknesses of students' work, supported by explanations and relevant examples to aid their development. Written feedback is provided in the "E-learning" system alongside students' submitted independent work. By reviewing interim test results and teacher comments, students can effectively use the feedback to improve their performance and prepare for examinations.

Most students in the Software Engineering Study Field received feedback via the SMK E-learning system, with consistent engagement from 60 to 62 out of 64 students between academic years 2020–2024. Some feedback is also provided verbally during lectures, particularly in practical or soft skill courses, enabling immediate reflection and improvement. A combined approach—written in Moodle and verbal in class—is used by many teachers. For those not providing feedback, Heads of Study Programmes intervene with support and guidance. Timely, detailed feedback is emphasized as a motivational and developmental tool, helping students grasp course content more deeply, plan their learning, and build critical thinking skills. Teachers also value receiving constructive feedback from students to refine their teaching methods and materials.

The Head of the Study Programme provides timely feedback and support to students with academic debts, helping them address challenges and improve their academic performance.

4.2.2. Graduate employability and career are monitored

The effectiveness of SMK's Software Engineering study field programs in preparing students for the labor market is closely monitored through multiple feedback mechanisms involving graduates, employers and social partners. A significant portion of graduates - 89%, based on Education Management Information System (hereinafter referred as "EMIS") as stated in SER are employed in roles such as programmers, IT specialists and multimedia designers. Graduates report that the skills they acquired during their studies, ranging from programming to communication and creativity are highly applicable to their careers. Employers also provide positive feedback on the graduates' competencies, particularly in areas of programming, communication and creativity, highlighting the alignment between the program and industry demands.

The HEI has established an active career monitoring system, collecting data from graduates at two key points (6 and 36 months post graduation) to track employability and career progression. The surveys indicate that most graduates secure roles closely related to their field of study, although approximately one third of graduates do not immediately enter the workforce. This data is used to inform ongoing program reviews and ensure the curriculum is continuously updated to meet labor

market needs. Feedback from graduates and employers led to the integration of new topics such as AI, project management, and business English into the curriculum.

To track the success of the programs, the HEI monitors employment rates and collects feedback from employers after internships. This helps make improvements to the programs, such as adjusting course content or increasing group sizes. Surveys from students also highlight areas for change.

The HEI offers flexible learning options such as English language courses and international internships which help students gain global exposure and enhance their language proficiency. Students have the option to select courses taught in English, such as IT Project Management. Offering programs in both English and Lithuanian supports diversity and encourages international student enrollment. Notably, there was almost no need for a translator during the meetings with the teachers, students and staff which demonstrates proficiency in English language alongside technical skills taught for students and integration of language competencies across all the disciplines at HEI.

The HEI also encourages the involvement of social partners, who regularly provide feedback on the professional competencies required by the industry. Social partners participate in study committees and collaborate with SMK to ensure that the curriculum aligns with real world expectations. The feedback from these stakeholders often leads to curriculum adjustments, such as the inclusion of more technical tools like GitHub and deployment practices, as well as the emphasis on multimedia to help students visualize their work beyond coding practices.

Moreover, SMK promotes a career ready approach by organizing career management programs like "HeyReady" which provides students with job placement opportunities, networking events and connections to the business community. Graduates also benefit from initiatives such as Career Days and contact fairs, where they can meet industry professionals and further enhance their employability.

Employers are satisfied with the growth and skills of SMK graduates, particularly after they complete internships that offer hands-on experience. These internships allow students to gain practical exposure to the workplace, which enhances their technical and soft skills. Employers also contribute to final thesis topics, ensuring they are aligned with current industry trends and real business challenges. Based on survey results from employers, indicated in the SER, the graduates have sufficient professional theoretical knowledge in the area of IT that is 4.2 in Klaipėda, 4.1 in Vilnius and 4.3 out of 5 in Kaunas. All employers have rated the development of general competences, such as communicability, creativity, entrepreneurship, and independence, with scores of 4.4 or 4.5 out of 5. The skills of having good foreign language knowledge (English, Russian) and being independent, with strong verbal and written communication skills, are rated 4.2 or 4.3, depending on the SMK branch.

Alumni feedback plays a crucial role in program improvements. According to the survey results provided in the SER, the opinions of graduates from the Software Engineering Study Field and employers regarding the skills and knowledge acquired by SMK students reflect positive trends, with scores of 4.3 and 4.2 out of 5 in all branches of SMK for the competences gained during studies and their contribution to the students' career goals.

Alumni suggested incorporating AI into the curriculum, lecturers were consulted and this change was successfully implemented. Similarly, a collaboration between SMK and a private company on

a cyber attacks project funded by the EU provided students with real case experience. Such practices enhance the program's relevance.

SMK focuses on both monitoring graduates' employability and helping students develop career management skills through the "HeyReady" newly branded program. "HeyReady" organizes activities to foster connections between students, the business community, and graduates. It aims to develop key employee competencies aligned with modern trends and offers career management services. Each year, HeyReady coordinates career days with public sector institutions, students, and companies from various sectors, featuring contact fairs and competitions. Over 700 participants attended career days in 2021, 2022, and 2023, with notable companies like Coca-Cola, LIMA, Hostinger, and Western Union offering job and internship opportunities.

SMK demonstrates a robust system for tracking graduate employability, gathering feedback, and adapting the curriculum to meet the evolving demands of the labor market. Through active engagement with alumni, employers, and social partners HEI ensures that its graduates are well prepared for their careers and equipped with the skills necessary to succeed in the changing technology landscape.

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

Academic integrity, tolerance, and non-discrimination are addressed by SMK in several ways: For example, students have the possibility to take part in events that focus on ethics, non-discrimination etc., or the library organizes an Academic Integrity Workshop. The institution has a comprehensive Code of Ethics that outlines the principles of academic integrity. The Code of Ethics is published on the HEI´s website as well as on the E-Learning platform. During introductory weeks, the students are introduced to the idea of academic integrity and ethical norms, and are informed about the Code of Ethics and consequences for violating this code. The Academic Ethics Commission, regulated by a separate well-documented process and document, is responsible for handling reported violations. These regulations and processes are actively used: in the evaluation period (2020-2024), e.g. 12 violations of students preparing independent work have been reported by lecturers, but also violations of academic ethics by academic staff members have been considered. A plagiarism detection tool is in use in order to help identify this type of violation. Recently, also the "Policy on the Use of Artificial Intelligence in the SMK", regulating the use of artificial intelligence, has been approved by the academic board.

The values of academic integrity and tolerance are also supported through workshops and regular training sessions, available for both students as well as staff members. Also courses deepening pedagogical competencies address these topics.

In the evaluation period, 12 lecturers applied for student failure to follow the academic integrity provisions described in the academic code of ethics. Consequently, the Academic Ethics Commission identified 7 violations of academic integrity and ethics. In addition, the Academic Ethics Commission considered 5 reported violations of academic ethics by administrative staff. in 2 of these cases, the violations have been confirmed by the commission and preventive actions such as e.g. additional seminars have been provided.

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

Options regarding appeals and complaints are formally defined at SMK in the Regulations of the Appeals Commission and Provisions of the Dispute Solving Commission. Appropriate boards/commissions deal with decisions about appeals and with solving reported conflicts. Appeals

can be filed on various aspects, such as violations during examinations, the final assessment of achievements of a course unit, the procedures of defending final theses, or violations of admission results and/or admission rules. The head of the academic division evaluates the validity, subsequently, appeals are registered and transferred to the commission for further analysis and decisions. During the evaluation period, 20 appeals by students have been filed regarding the final assessment of course units, in 5 cases final assessments have been changed after an appeal.

Complaints filed to the Dispute Solving Commission also can be of various types, such as e.g. learning conditions, learning and rest time, payment for studies, imposing disciplinary penalty, study process implementation, following internal order rules, implementation of requirements for safety and health, and other issues. Within the period of evaluation, the Dispute Solving Commission handled 6 complaints submitted by students.

ANALYSIS AND CONCLUSION (regarding 4.2.)

Systematic monitoring of students' academic progress, along with appropriate support, enhances study quality at SMK and fosters progress. Additionally, the feedback given during studies encourages self-assessment of learning outcomes and aids in planning further academic advancement.

SMK regularly checks on students' progress to help improve the quality of their education and support their growth. By receiving feedback from lecturers, peers and industry professionals, students can see how well they are doing and find areas to improve. This feedback helps students stay aware of their strengths and weaknesses, giving them the chance to take charge of their learning and set goals for the future. SMK offers personalized support to meet each student's needs, making sure they have the tools they need to succeed.

Self-assessment is a big part of this process, letting students reflect on their learning and plan for what is next in their academic and professional journey. By gathering feedback from employers, alumni and social partners, SMK keeps the curriculum relevant to what the job market needs. This approach ensures students graduate with not only the knowledge they need but also the practical skills to succeed, helping them stay adaptable in the changing world.

The monitoring and career support provided to graduates of the Software Engineering Study Field are highly effective. Graduates benefit from systematic tracking of their employment status, which is coupled with active initiatives for career development and continuous education. The strong alignment between the study program outcomes and the labor market, along with the integration of graduate feedback into program improvements, ensures that SMK’s approach to graduate employability is both comprehensive and responsive to industry needs.

SMK demonstrates a strong commitment to developing students’ English language proficiency alongside technical and soft skills, effectively preparing graduates for global career opportunities. Through flexible learning options such as English taught courses, international internships and the integration of business communication and public speaking, the HEI fosters essential competencies for international success. The opportunity for students to customize their study paths with English language course units further enhances their language skills in a practical context. SMK’s responsiveness to employer and graduate feedback, reflected in curriculum updates such as the inclusion of business English, highlights a proactive approach to aligning education with global market needs, while its bilingual program offerings foster a diverse academic environment and support the institution’s internationalization goals.

A code of academic ethics is in place, and seems to be updated on a regular basis. For example, the recent topic of ethical use of AI tools has been addressed with an additional policy. The students seem to be well-informed about the code of ethics and values such as tolerance and non-discrimination. Opportunities for staff members as well students to participate and workshop and events regarding academic integrity and related values exist and are used by these stakeholders. It can be noted that the code of ethics is not only a document but is in fact used in practice. Several reported violations of academic standards have been processed by the Academic Ethics Commission.

A well-defined procedure and responsible commissions are also installed for filing appeals and complaints. These procedures are well-known by the students, a culture of accepting complaints as a valuable tool for improving the quality of the organization can be observed. Again, these procedures do not only exist “on paper”, but are brought into live by the HEI and its students. An impressive conflict culture exists, and opportunities (such e.g. mediation) are provided in order to solve disagreements and conflicts. It is a very positive sign of this conflict culture that these instruments are used by the students.

No recommendations have been given in the previous evaluation of the Programming and Multimedia programme.

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
Short cycle				X	
First cycle				X	

COMMENDATIONS

1. The HEI's clear and accessible appeals process, which includes the opportunity for students to meet with professors for retakes and utilize Student Union assistance, is commendable. This system ensures that students have a fair chance to address grievances and succeed academically.

2. Exceptional Disability Support. The provision of wheelchair accessibility, extended test times, text readers for visually impaired students, and scholarships for students with disabilities demonstrates a strong commitment to inclusivity. These accommodations create an environment where students with disabilities can thrive academically and socially.

3. The way the HEI deals with complaints and conflicts appears to be outstanding. The Dispute Solving Commission seems to find appropriate ways to deal with conflicts, including even mediation as a conflict resolution approach.

4. All staff and students demonstrate a high level of English proficiency, enabling seamless communication across the HEI and significantly reducing the need for interpretation. This creates an inclusive, professional and efficient learning environment that benefits both local and international members of the academic community.

5. SMK’s critical approach to self-improvement, regular reflection and evaluation of the SER process show a strong commitment to continuously improve the quality of its education.

6. Being part of the InfoBalt association and working with various company representatives strengthens SMK's industry connections, offering students and staff valuable insights and opportunities.

7. A variety of activities with social partners such as internships, joint projects and competitions enhance students' practical experience and employability while keeping programs relevant.

8. SMK’s graduates find employment quickly, reflecting the high quality of education and training provided.

9. Introducing the "HeyReady" program makes career opportunities more available and attractive to students and is a great example of collaboration between both students and employers.

RECOMMENDATIONS

For further improvement

1. Focus on industry specific tools, workshops on emerging technologies like AI and Cloud computing and iteration based studies would be helpful. Addressing the need for practical knowledge in database management, as requested by social partners, would better align the study programmes with industry needs.

2. The learning outcomes of the courses should remain rather fixed to allow better transparency and consistency and correct alignment to the study programme goals. They should be formulated in a way that minor adaptations to the courses are possible without changing them. It is possible to have some general learning outcomes which do not change frequently (e.g. students are able to explain object oriented concepts) and maintain the details in the course details (e.g. the course is taught in Java with the IDE Eclipse).

3. Expand Disability Support. While the HEI provides many facilities for students with disabilities, consider conducting regular assessments to identify any additional needs and ensure that all students have equal access to educational opportunities.

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

The general requirements for the implementation of the study require that more than half of the teachers of the study program must have at least 3 years of experience in the field of the subject being taught. At least 10 % of the volume of the course units of Software Engineering (first cycle and shorts cycle study) must be taught by scientists, who have a doctoral degree. Practical activities (practical works, exercises, student internship) of short cycle students can be headed by a person, who has at least bachelor degree. The staff of the Software Engineering study program in the Vilnius branch consists of 23 teachers. Teachers who have scientific degrees or recognized artists implement approximately 22 percent of the Programme volume. Approximately 95 percent of the volume of the Programme is provided by teachers that have a sufficient (at least 3 years) experience of professional activity. 81 percent of all the teachers know English at least at level B2. More than 90 percent of teachers in the Software Engineering Study Field have both practical and didactic work experience. Approximately 86 percent of the study programme volume will be taught by teachers – practitioners.

The school supports the inclusion of practical elements in teaching (practical teaching with the involvement of social partners, involving students in research projects), which is presented in the SER and was subsequently confirmed during the interview.

Pedagogical workload of teachers is distributed taking into account quality assurance of the Programme implementation and competence of teachers in the area of the taught course unit. Workload management was also confirmed during the interview. Work on projects is rewarded with additional funding.

The replacement of teachers in the event of their sudden or long-term unavailability during the semester is not formally established.

According to the interview with the HEI management, teachers have freedom how to use AI tools in teaching and for students.

Teachers' approach to students with disabilities is on an individual level, there is no general management or exactly given rules.

Within the interview, different groups of participants emphasized strong support for teaching soft skills (subjects such as 'public speaking' or 'communication' were mentioned).

It was also noted that the staff had a strong team background and the information provided during the interviews by the different groups was highly coherent.

During interviews with students and teachers, it was confirmed that the school has a process in place to resolve student complaints regarding the way subjects are taught (at the end of the course, teachers have the possibility to add comments) and is also prepared for situations where a student disagrees with received evaluation.

ANALYSIS AND CONCLUSION (regarding 5.1.)

Based on information provided by SER and during the interview, it is obvious that the academic staff is stable, qualified and professionally competent for teaching the assessed study program.

The workload (amount of lessons per week, amount of theses led, work on scientific projects) of teachers is managed.

The HEI has to process (and provide documents) how to react to the market and students need to continuously update the teaching process. Students' feedback about the quality of teaching is well managed.

Strong support for teaching soft skills and critical thinking was recorded.

An area where there is a space for improvement is work with students with disabilities, where the HEI successfully addresses students with mobility problems, but less space is devoted to students with specific reading and writing disorders (e.g. dyslexia).

It is also recommended to have backup plans ready in case of sudden or long-term indisposition of teachers (how will continuity of teaching be ensured and, in the event of a longer-term absence, other activities, such as guaranteeing subjects, etc.).

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

SMK International Relations Office provides support mechanisms including administrative and academic support for teachers wanting to go to Erasmus+ mobility. Mobilities are included in the workload of the teachers. During the period under evaluation, SMK has concluded inter institutional cooperation contracts with 87 foreign HEI from 31 countries of the world (including more than 40 partners that implement studies in the Informatics area). In academic years 2020 - 2024 eleven teachers from six partner HEIN in foreign countries (Czech Republic, Spain, Taiwan, Kosovo, Latvia, Portugal) gave lectures to students of the Study Programme in Software Engineering. During the years 2020 to 2024 18 teaching and learning visits (9 teaching, 9 learning) in nine countries were realized. Every year 15 - 20 employees can use the possibilities of international mobility, taking into account the awarded funding.

The SER mentions that limited funding for implementation of staff mobilities is a problem. Despite this, the SMK's Strategic Activity Plan (2021-2025) maintains the goal of increasing the inflow and outflow of employees.

During interviews with teachers participating in the evaluated study program, it was found that only a small proportion of them had participated in Erasmus mobility.

SMK organises International weeks every year with an active involvement of the representatives from partner institutions. During the period under evaluation six international weeks were implemented with the participation of representatives from 68 partner institutions.

During COVID-19 pandemy teachers were more actively involved in virtual teaching mobilities (10 virtual teaching and 5 learning mobilities were implemented). Also an international virtual teaching week was organized with lectures of 9 teachers from partner institutions.

The document '2021-2025 SMK Strategic Activity Plan' maintains a goal to increase the flows of incoming and outgoing staff and also a network of international partners is expanded

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

At the beginning of a new academic year the SMK Head of Academic Activity analyzes the demand for teacher competences, by asking teachers to present their demand for competences. Systematic development of the competences of teachers in SMK consists of their participation in training, seminars, conferences organized by SMK, national and international projects, trainings organized by other institutions and mobility programmes. In 2020-2021 twelve teachers of Software Engineering Study Field participated in the training, seminars, and conferences organized by other institutions.

SMK organized the following pedagogical/didactic trainings for teachers: Experiential Education in the Teaching (Learning) Process, Strategy of Experiential Education: Teaching (Learning) from Experience through Experience, Active Methods of Learning: Dissemination of Experience) and others.

During 2020-2024 teachers participated in 43 trainings aimed at developing didactic competences ('Development of Digital Competence of Pedagogues', 'Creation of Interactive Content in the Virtual Learning Environment Moodle' and others).

ANALYSIS AND CONCLUSION (regarding 5.2.)

In section 5.2 we see considerable support for teacher mobility and the internationalisation of teaching. Despite the SER announcing a high level of teachers participating in mobility exchange, during the interview it was revealed that only a portion of teachers from evaluated study programmes used the Erasmus exchange for teaching.

Formal support for the internationalization of teachers is at a good level.

Virtual teaching elements that were implemented during the COVID pandemic are still being used afterwards.

The school also provides sufficient support for the professional growth of teachers (pedagogical and didactic training). Due to the trend towards the internationalization of teaching, it is important to continuously support the development of the language competences of lecturers.

The HEI has a well-equipped library, with extensive collections of resources available to teachers, including subscription access to scientific databases.

All recommendations from the previous evaluation of the Programming and Multimedia programme were addressed.

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
Short cycle				X	
First cycle				X	

COMMENDATIONS

1. Consistency between the facts in the SER and the facts found during the interview; the teaching staff appears to be a cooperative team
2. Strong support for teaching soft skills and critical thinking
3. Established procedure for resolving student's feedback after semester - teachers have possibilities to comment
4. Managed teachers workload

RECOMMENDATIONS

For further improvement

1. Establish procedure for ensure a substitutability in case of long-term or sudden absence of a teacher
2. Define a procedure for teachers how to work with students with disabilities (especially disabilities such as dysgraphia, dyslexia - here it is recommended, for example, to set a longer time for completing tests and exams)
3. Continuously improve teachers' language competences
4. Improving teacher mobility would give both faculty and students more international exposure. Encouraging teachers to take part in international conferences, research and teaching exchanges could bring new ideas and diversity to the student’s learning experience.

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

Vilnius Branch has 39 lecture rooms which include 6 computer rooms and two rooms for meetings and presentations. Additional classrooms, computer labs and a conference hall are available in the Kaunas and Klaipėda branches. Available software fits the content of the study programme (Google Workspace, MS Office, Visio, Visual Studio, IBM SPSS, Blender, Crystal Reports and others). Students also have the opportunity to use the infrastructure of social partners to access the newest IT technology (e.g., Creative partners, Site.pro; Omega 365 Lithuania; Naujosios medijos grupė, JSC; Dragon Attacks, JSC; Omnisend, JSC; Teltonika telematics, JSC; Tesonet ASSETS; E-information Centre, JSC; Nortal, JSC.).

During the tour of the facility, it is apparent that the overall modern concept of interior architecture provides a pleasant environment for studying.

SMK buildings are equipped with lifts, special surfaces of stairs, sanitary units, and parking spaces adapted for people with disabilities that enable people with different disabilities to be independent, to move unaided and without barriers inside and outside buildings.

SMK has standard computer labs. No specialized labs were shown during the tour (which may be due to the study programs the school offers).

The library has a good amount and level of up-to-date scientific sources, both paper and digital, as well as good subscriptions and cross-library links available for all students and teachers. The library uses ALEPH information system and virtual library for providing efficient services. The library collection contains over 32 thousand individual and 7243 titles of books and journals in Lithuanian and foreign languages. Every year, SMK allocates upwards of 5,000 € for printed publications (books and periodicals).

Currently there is access to 14 foreigner and Lithuanian electronic databases with more than 16 thousand journals. SMK provides access to global scientific databases like EBSCO Publishing, Emerald, Taylor & Francis. The library users have access to a collection of electronic books such as EBSCO (141 thousand books). The library also subscribes to three eBook collections (Academic Collection EBSCO, eBook Collection EBSCO, eBook Open Access Collection). SMK allocates more than 23,000 € annually for subscriptions of scientific publications and subscribed databases.

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

According to the SER, for every academic year, lecturers can give information about required ressources using a corresponding report form. Such resources may include literature, software, computer equipment, etc. Students have the opportunity to report concerns about such resources via surveys as well as via regular meetings with the Head of the study programme.

After collecting these reports by lecturers and students, it is in the responsibility of the Head of Study Programmes to structure the various requirements, and subsequently apply to the Study Programme Committee. When the Study Programme Committee has come to a decision about resources to be acquired, a corresponding application is prepared to be given to the Director.

Within the last three years, the HEI has invested > 260.000,- EUR in computer equipment, >48.000,- EUR in Software, >135.000 EUR in hardware and laboratory equipment, >36.000,- for hybrid teaching equipment, and >69.000,.- for member fees and subscriptions of scientific databases. The material resources in the Study Field of Software Engineering are suitable and sufficient to ensure an efficient learning process of the students.

ANALYSIS AND CONCLUSION (regarding 6.1.)

The teaching spaces are modern and create a pleasant environment for studying.

The library is equipped with extensive printed and electronic resources and spaces for students. It also has an extensive collection of subscription scientific databases.

During the tour, lecture halls, computer labs, and other spaces for teaching and studying were shown, but no specialized laboratory was shown.

The HEI allows movement throughout the campus for students with mobility disabilities.

The planning process for acquiring and updating resources required for students and lecturers is structured in a bottom up way and is performed regularly for every academic year. Students as well as lecturers can report requirements to the Head of Study Programmes. The Study Programme Committee discusses a decision and a corresponding application is given to the Director. Both teaching staff as well as students report that this process successfully ensures up-to-date and sufficient resources.

No recommendations have been given in the previous evaluation of the Programming and Multimedia programme.

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
Short cycle				X	
First cycle				X	

COMMENDATIONS

1. The bottom-up approach for the identification of required resource updates and upgrades appears to be accepted and seems to be working successfully.

2. The ability to quickly access the required software and make fast purchasing decisions ensures that students and the HEI have the tools they need without any delays.

3. Well-equipped and accessible library.

RECOMMENDATIONS

For further improvement

1. For teaching professional IT subjects, it would be appropriate to create laboratories with equipment for these subjects (providing additional equipment compared to a regular computer lab)

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

The HEI's internal quality assurance system is governed by a Quality Guide, approved by institutional leadership, which defines quality policies, procedures, responsibilities, and performance indicators for all organizational levels, ensuring alignment with strategic goals, national legislation, and European Higher Education quality standards (ESG).

The HEI's internal quality assurance is guided by principles of equality, openness, transparency, and academic ethics, ensuring fair treatment, open access to information, inclusive decision-making, and adherence to the highest standards of integrity and justice It involves all stakeholders, including the academic community and social partners, in planning, implementing, monitoring, and improving quality, as outlined in the Quality Guide, which defines each stage, the tools used, outcomes, and participants.

Each party of interest is responsible for quality and is assigned specific tasks. Students are responsible for their learning outcomes and the HEI has an active student representation being involved in quality assurance processes. Lecturers are responsible for the conformity of the course contents. The Department of Studies, led by the Head of Studies, manages the study process by ensuring compliance with relevant regulations, preparing schedules, registering studies, offering academic and social support to students, and disseminating study-related information. The head of the study programme is responsible for the assurance of implementation quality of the implemented study program in every division. Study programme committees are responsible for the assurance of the quality in the implemented study programmes and constant improvement and consist of heads of study programmes, lecturers, representatives of social partners, representatives of students and alumni. A single study programme committee is formed for all three study programmes, led by a chairperson appointed by the HEI's director. This committee, operating across all three divisions, ensures the unified and cohesive implementation of the programme's aims, learning outcomes, and continuous improvement.

The Head of Academic Activity coordinates academic operations, while the Director ensures the creation of conditions for study implementation and growth. Social partners, alumni, students, and lecturers actively participate in decision-making and quality assurance processes, including self-evaluations and study programme development. Various structural divisions, such as the Head of Projects, manage exchange programs, internships, and international collaborations. The Academic Board, the HEI's highest academic body, oversees study orders, programme approvals, and quality assurance implementation.

The HEI's study quality assurance system is centered around feedback, which is gathered from students, lecturers, graduates, employers, and other stakeholders. The process, including survey organization, analysis, and public sharing, is regulated by the Order of Organizing Feedback. This feedback is crucial for updating study content and processes, ensuring quality, and developing the competences of future professionals. The results are used for self-evaluations and long-term

monitoring of study quality, with discussions and updates shared in academic meetings and on Moodle.

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

SMK has developed a robust system as presented in SER of organizing feedback to involve various stakeholders in its internal quality assurance processes, ensuring that a broad range of perspectives is considered when evaluating and improving the study programs. This includes active engagement from students, lecturers, graduates, social partners, and other educational institutions.

Students provide regular feedback through surveys conducted throughout the academic year, which directly influence changes in the curriculum and teaching methods to better meet their needs. Lecturers are also involved in the process, completing self-evaluations and providing feedback to enhance the study process. Graduates' feedback, collected six months and three years after graduation, offers valuable insights into the relevance of their studies and their career progress, although the low participation rate in these surveys limits the depth of the data. Social partners, such as employers, contribute through surveys on internship quality, final thesis evaluations, and participation in committees, ensuring that the study programs align with industry expectations and market needs.

SMK also collaborates with other educational institutions like Vytautas Magnus University, Vilnius TECH and Kaunas University of Technology, both nationally and internationally, to share knowledge, organize conferences, and exchange best practices, which strengthens the overall quality assurance process. This collaboration fosters innovation and continuous learning, benefiting both the academic community and students.

Despite positive feedback on the program's academic strength, employers highlight the need for more practical, hands-on experience to better prepare graduates for the workforce. Many employers suggest that graduates should be capable of tackling real-world problems, such as developing solutions for invoice and time management systems, or creating web pages that balance both technical and visual requirements. In response, SMK is integrating emerging technologies like AI into the curriculum, particularly for practical applications like energy forecasting, and incorporating ethical guidelines to better prepare students for the challenges they will face in the professional world. However, industry feedback still has room for greater influence in shaping the program, as the proposed topics from social partners have a relatively low impact on the curriculum.

The involvement of various stakeholders, including students, lecturers, graduates, and social partners, plays a critical role in the internal quality assurance process. Stakeholders actively participate in surveys and meetings to provide feedback on study programs, ensuring that the curriculum is aligned with labor market needs and student expectations. Notably, social partners assess the quality of internships, which are a key component of the study experience, offering valuable insights into the practical application of student skills. These assessments help maintain the relevance of the programs and contribute to the continuous improvement of the curriculum.

A wide range of internship options enriches student experience, providing ample opportunities for students to gain hands-on experience and build their professional networks. By working directly with industry professionals, students can apply their theoretical knowledge in real-world settings, enhancing their employability upon graduation. SMK's commitment to involving stakeholders in

these processes ensures that students are not only well-prepared academically but also equipped with the practical skills needed to succeed in the workforce.

The quality assurance process at SMK is adaptable and continuously updated based on ongoing feedback from students, lecturers, graduates, and social partners. This responsiveness ensures that the curriculum stays aligned with the evolving needs of the labor market and academic community. While there are areas for improvement, such as integrating more hands-on training and fully incorporating industry suggestions, SMK's approach remains effective in preparing graduates for the job market. The institution's commitment to stakeholder engagement and continuous program improvement helps ensure that students are well-equipped for their careers, with study content and processes being regularly updated to meet the needs of both students and the labor market.

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

The HEI ensures that information on its programs, their external evaluations, improvement processes, and outcomes is collected, used, and made publicly available. The HEI's website, smk.lt, serves as a comprehensive platform where this information is readily accessible.

The improvement processes at the HEI are data-driven and focused on achieving measurable outcomes. Meetings with students are held multiple times each semester, and the information gathered is used to make changes to the study process. The results of these meetings are discussed with students and shared on Moodle.

Based on feedback from teachers (e.g. opportunities of using artificial intelligence in the preparation of independent work tasks and final theses), course content, study material resources or the implementation process are updated and improved

Based on feedback from employers, the implementation of professional activity internships and the process of final thesis defense are improved (e.g. increase of ordered final theses, topics of final theses reflect relevancies of modern labour market).

Employers, social partners, alumni, teachers, and students participate in roundtable discussions organized by SMK, such as those on topics like academic integrity, programming languages, virtual/augmented reality, and multimedia development with AI.

The evaluation of the Study Programme's quality, along with its results and changes, is discussed in meetings with teachers, the academic community, and public discussions with students and social partners, and is also shared on Moodle.

7.1.4. Student feedback is collected and analysed

At SMK, in order to improve the study quality, students´opinions and feedback on the quality of studies are consistently and regularly collected.. This feedback is crucial for understanding the student experience and identifying areas for improvement. The HEI employs various mechanisms to gather student feedback, including surveys, focus groups, and individual consultations.

The analysis of student feedback is used to inform improvement processes and enhance the quality of education. For example, feedback on teaching methods, course content, and support services is used to make data-driven decisions that improve the student experience. The HEI´s

commitment to acting on student feedback demonstrates its dedication to student-centered education and continuous improvement.

ANALYSIS AND CONCLUSION (regarding 7.1.)

The development of study quality at SMK is driven by continuous monitoring, transparency, and an internal quality assurance system that engages all stakeholders. At SMK, the involvement of stakeholders, including students, graduates, lecturers, and social partners plays a key role in the internal quality assurance and continuous improvement of study programs. Stakeholders actively participate in various evaluation processes, ensuring the quality of the study experience is constantly monitored and improved as mentioned in the SER. For instance, students provide feedback on the organization of studies, teaching methods and their overall learning experience through surveys conducted throughout the academic year. This feedback directly influences adjustments to study plans, ensuring they meet the needs and expectations of students.

Graduates also contribute significantly by participating in surveys six months and three years after graduation, offering insights into their career progression and how well the program prepared them for the labor market. Social partners, such as employers engage in annual surveys regarding internship quality and final thesis assessments as well as participate in committees to evaluate and improve study programs. Additionally, SMK cooperates with other educational institutions and professional bodies, further enhancing the relevance and quality of the curriculum. This collaborative approach ensures that the programs remain aligned with industry needs and provide students with the skills required for success in their careers.

Feedback and flexible collaboration with social partners ensure the timely updating of study content and processes, facilitating the preparation of competent specialists. Formal evaluation is communicated through the programme manager, additionally teachers do individual feedback.

Strong collaboration between SMK and its social partners, including companies and industry associations such as the Lithuanian Computer Games Association and the Baltic Digital Innovation Centre, plays a key role in ensuring students are well-prepared for the job market. This is clearly reflected in the wide range of internship opportunities available. During the site visit, students highlighted that they do not need to make significant efforts to find internship placements due to a great variety of options which is an indication of the institution’s strong ties with the business sector. Company representatives confirmed this during interviews, emphasizing the ongoing cooperation and real world engagement. SMK has implemented over 150 business challenges in partnership with the Lithuanian Association of Hotels and Restaurants, where students from various study fields, including Software Engineering, work with lecturers to solve practical business problems further strengthening their skills and readiness for professional careers.

SMK has a solid quality assurance system that involves students, lecturers, graduates, social partners, and other educational institutions. The HEI regularly collects feedback through surveys, focus groups, and consultations to make sure the programs meet students' needs and industry standards. While graduate participation in surveys could be better, the HEI does a great job of using feedback to improve programs and being transparent about the results. SMK also uses data and input from industry partners and organizations like UNESCO to keep programs in line with market demands. SMK´s AI policy and Ethical AI project show its commitment to responsible AI use. The HEI’s website provides easy access to important information, promoting trust and accountability.

The students' opinions and feedback are collected very regularly in monthly meetings with student representatives with the head of study programmes and with course-based evaluations. During the site visit, students appeared to feel heard. There is a good feedback rate of about 50% from student surveys.

All recommendations from the previous evaluation of the Programming and Multimedia programme were addressed.

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
Short cycle				X	
First cycle				X	

COMMENDATIONS

1. HEI analyses student feedback to make sure its programs meet their needs creating a more engaging and effective learning environment. Good feedback rate of 50%.

2. The HEI's website is well structured and makes it easy for stakeholders to access important information.

3. SMK's AI policy and Ethical AI project demonstrate a proactive approach to using AI responsibly and ensuring ethical standards in administrative processes.

4. HEI uses data, feedback from partners, and insights from conferences and organizations like UNESCO to make sure study programs meet current market needs.

5. Gathering feedback from graduates and students after internships helps to improve the process and ensures it meets academic and industry standards.

6. HEI's well-functioning academic councils and committees ensure high standards in academic quality and decision-making processes.

7. A wide range of internship options gives students ample opportunities to gain experience and build their professional networks.

RECOMMENDATIONS

For further improvement

1. HEI has strong relationships with its social partners therefore increasing joint project funding and support would provide more practical experiences and industry applied projects, further enriching students' practical learning.

V. SUMMARY

The goal of this reaccreditation is to have an external look on what SMK is doing and how SMK is performing. The key development actions after the previous accreditation are the improvement of teaching personnel, developing relationships and the adoption of programs (new study model, AI development, more subjects on multimedia).

The provided SER is of good quality and was pretty good to follow. Argumentation is consistent and relevant evidence (e.g. statistics) is given for the respective parts. However, in the beginning it has been hard to understand the internal structure and functioning of SMK which consists of different branches and locations.

The site visit gave a very good insight into the remaining open questions.

SMK has demonstrated a good view on upcoming challenges, such as AI in education. An AI policy is being prepared at SMK, ethical AI usage is described for administrative usage and processes. Besides, 2 EU funded projects deal with this topic. Teachers have the freedom to utilize AI technologies and may request licences. The study committee discusses training ethics and social partners are engaged, too.

Alumni of SMK are well prepared, since SMK offers a good basic education with practice and hands-on learning. There is a high employment rate of graduates of the Software Engineering study field. SMK offers many diverse programs which contribute to the overall strategy of the HEI and allow students of various programs to work together. There are good activities with social partners and SMK is very open minded regarding internationalisation activities (e.g. experience stories from students being abroad, english courses in lithuanian study programs). SMK has a very good focus in R&D (e.g. funded projects, spin off).

We thank the HEI for preparing a well written report, which is of very high quality. We also thank the HEI for the warm welcome during the site visit. SMK seems to be a very cooperative place with a very good culture.

VI. EXAMPLES OF EXCELLENCE

- This HEI has shown exceptional accessibility of the facilities for students that allows them to book places of study that are well suited for activities such as public speaking, software development, presentations, online meetings and live meetings.

- The SMK has a significant amount of student feedback collection methods, including monthly student meetings, online forms and surveys.