STUDIJŲ KOKYBĖS VERTINIMO CENTRAS
CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

INFORMATION SYSTEMS FIELD OF STUDY

PANEVĖŽIO KOLEGIJA

EXTERNAL EVALUATION REPORT

Expert panel:

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2. Academic member: **Assoc. Prof. Dr. Andrejs Romanovs**
3. Academic member: **Assoc. Prof. Dr. Roman Danel**
4. Academic member: **Assoc. Prof. Dr. Dalia Krikščiūnienė**
5. Social partner representative: **Mrs. Gunda Tarakanovienė**
6. Student representative: **Ms. Karolina Jonuškaitė**

SKVC coordinator: Mr. **Gustas Straukas**

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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: **Dr. Izidor Golob,** University of Maribor;
2. Academic member: **Assoc. Prof. Dr. Andrejs Romanovs,** Riga Technical University;
3. Academic member: **Assoc. Prof. Dr. Roman Danel,** Technical University of Ostrava;
4. Academic member: **Assoc. Prof. Dr. Dalia Krikščiūnienė,** Kauno kolegija;
5. Social partner representative: **Gunda Tarakanovienė,** UAB "Pixinn";
6. Student representative: **Karolina Jonuškaitė,** Vilnius University.

1.3. SITE VISIT

The site visit was organised on 28 May 2024 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;
- Team responsible for preparation of the SER;
- Teaching staff;
- Students;
- Alumni and social stakeholders including employers.

There was a need for translation during the meetings, the translator was on the site.

1.4. BACKGROUND OF THE REVIEW

Overview of the HEI

Panevėžys College, also known as Panevėžys University of Applied Sciences, is a state higher education institution established in 2002 by the Resolution of the Government of the Republic of Lithuania. It is a public legal entity acting as a public body. The college offers 19 accredited first-cycle programs and one short-term study program as of January 1, 2023. These programs are divided into seven groups of study areas: health, social, engineering, computer science, educational sciences, business and public management, and law.

Overview of the study field

The Information Systems study at Panevėžys College is positioned within a broader context of academic and research activities, aligning with the institution's strategic objectives to foster innovation and quality in education. The college emphasises the integration of scientific developments into the curriculum and encourages active participation of faculty and students in applied research projects. This approach not only enhances the educational experience but also contributes to regional and national development. Strategic partnerships and projects related to the field of Information Systems are pursued, particularly those that involve collaboration with industry and business entities, to ensure that the study programs remain relevant and responsive to the needs of the regional job market and society at large

Previous external evaluations

There were previous programme evaluation in 2018. This is the first external study field evaluation after programme accreditation.

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 - samples;*
- *Information on the results of the surveys conducted in the autumn semester 2023;*
- *Description of the study module;*
- *How learning outcomes of the study program fits learning objectives of the study field "information systems";*
- *Minutes of the meeting of the programme committee of the field of study information systems (b02) - samples of 2024-05-20 and 2024-05-08.*

Additional sources of information used by the review panel:

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

II. STUDY PROGRAMMES IN THE FIELD

First cycle/LTQF 6

Title of the study programme	**Development and Maintenance of Information Systems**
State code	6531BX036
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's degree in computer science
Language of instruction	Lithuanian
Admission requirements	Secondary school
First registration date	17-04-2018
Comments (including remarks on joint or interdisciplinary nature of the programme, mode of provision)	

III. ASSESSMENT IN POINTS BY CYCLE AND EVALUATION AREAS

The first cycle of the information system field of study is given a positive evaluation.

No.	Evaluation Area	Evaluation points[1*]
1.	Study aims, learning outcomes and curriculum	3
2.	Links between scientific (or artistic) research and higher education	3
3.	Student admission and support	3
4.	Teaching and learning, student assessment, and graduate employment	3
5.	Teaching staff	3
6.	Learning facilities and resources	3
7.	Quality assurance and public information	3
	Total:	**21**

[1]**Evaluation points:**
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.

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 programme aims and learning outcomes are well aligned with the needs of the society/labour market.

The problem of the shortage of information technology (IT) specialists has been raised in Lithuania (media, official speeches of company managers, representatives of business, industry associations), and it is noted that there are currently thousands of vacancies in Lithuania for various profiles of IT specialists.

Analysis of the economic environment made by The Chamber of Commerce, Industry and Crafts of Panevėžys demonstrates that the need for graduates of the ongoing study programme will remain and grow, thus creating a real opportunity for the graduates to realise themselves in the labour market as specialists in the development and maintenance of Information Systems.

Study modules are regularly reviewed by the Study Programme Committee and discussed with social partners in order to align the descriptions of study modules with the required professional qualifications, as well as the shortage of employees in Panevėžys County.

The current graduates' employment shows increasing trend, 80% of graduates are employed one year after graduation in 2022 VS 50% in 2021 (although the presented data scope is not large enough for the complex study due to only 2 cohorts' graduation); all are employed in IT sector, which corresponds most closely to the profile of the study programme.

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

The aim of the study programme is closely linked to the Mission of the College "to carry out higher education studies based on scientific knowledge and practical skills, providing students with modern competences that have added value in the smart society", to the goals of the strategic activities of the College "to carry out high-quality and competitive studies" and "to strengthen the College's partnership with the business and public sector", as well as to the main strategic aim of the College "to increase the competitive advantage of Panevėžys College and its impact on the development of the region and the country through innovative and high-quality studies and applied scientific activities". Studies in the College meet the requirements and quality standards of the study programme through the Quality Policy.

The study programme complies with HEI's mission, goals, and strategy.

ANALYSIS AND CONCLUSION (regarding 1.1.)

The analysis herein is based on the information provided in the Self-Evaluation Report with the annexes to it, as well as in the interviews conducted during the visit and additionally provided documents. All above mentioned criteria are satisfied. No major shortcomings have been identified.

The aim and learning outcomes of the study programme are correctly formulated and correspond to the strategy and goals of the College. The study programme meets the needs of the industry and the labour market in terms of technical/scientific knowledge and skills. Demand for the field specialists in the labour market indicates good job prospects for graduates of the study programme.

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

Self-evaluation report confirms that the study programme complies with legal requirements.

The study programme is the first-cycle college study programme of the field of Information Systems, awarding the professional bachelor's degree in Computing. After completing the study programme, students acquire competences corresponding to the 6th cycle of the qualifications according to the requirements of the European Qualifications Structure and National Qualifications Structure (SER, pp. 9). The Development and Maintenance of Information Systems (hereinafter DMIS) study programme complies with the General Requirements for the Implementation of Studies (2023). The study outcomes of the programme and learning outcomes of the modules and study plans are constantly resumed and necessary changes are made, taking into account the requirements of the legal acts and comments of information systems specialists (SER, pp. 9).

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

The results of the study programme (learning outcomes) are adequate for the bachelor's degree and comply with the aim and objectives of the study program. Learning outcomes include both theoretical and practical aspects of Information Systems. The study methods of the modules are relevant to both professional training of information systems specialists (i.e., case analysis, problem solving situations, examination of practical examples) and soft skills development (i.e., teamwork, presentations). Study learning outcomes, study methods and assessment methods of the programme are presented in the module descriptions, however these descriptions were not presented in the SER (this information was requested and provided during the interview). The studies are assessed in accordance with the Description of General Study Implementation Requirements (2023) and the Description of the Study Achievement Assessment Procedure of the College (2017) (SER, pp.11).

1.2.3. Curriculum ensures consistent development of student competences

The curriculum ensures consistent development of students' competencies by providing a structured and comprehensive framework that ensures a consistent 3 year learning process. Each study year is designed to build upon previous knowledge and skills acquired in the previous study year, fostering a progressive and cohesive learning process. This systematic approach not only enhances students' understanding of the

information systems theoretical knowledge but also prepares students for real-world applications and future academic pursuits if they decide to continue their educational journey.

The self-evaluation report (SER) provided the team with an in-depth analysis of the study modules and their contexts. It details the objectives, content, teaching methods, and assessment strategies of each module. This report serves as a crucial tool for continuous improvement, allowing the SER team to reflect on the effectiveness of the curriculum and make necessary adjustments to better meet students' needs.

However, the motivation for students to engage in additional activities, such as applying for research grants, is notably absent. The discussions during the onsite visit revealed a lack of emphasis has resulted in a generally lower level of student motivation in applied research area. Addressing this gap is needed to encourage students to pursue extracurricular academic opportunities, which can significantly enhance their competences and professional development.

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

Students can work on an individual plan, allowing them to choose from four specialisations (modules). This flexibility enables them to tailor their studies according to their personal learning goals and intended outcomes. However, the options for elective courses are limited, with only two available. This restriction may hinder some students from customising their curriculum to match their specific interests and career aspirations. Expanding the range of elective courses could provide students with more opportunities to explore more subjects in detail.

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

The process of choosing the topic of the final thesis is defined, the institution has created documents describing the entire process. The College supports the definition of final thesis topics by companies.

The topics of final theses in SER correspond to the content of the study program. Connecting the topics of final theses with practice corresponds to the practical focus of the study programme.

ANALYSIS AND CONCLUSION (regarding 1.2.)

The analysis herein is based on the information provided in the Self-Evaluation Report (SER, pp. 9-14) with the annexes to it, as well as in the interviews conducted during the visit and additionally provided documents. All above mentioned criteria are satisfied. No major shortcomings have been identified. However, some minor weaknesses have been identified.

The study program complies with pertinent national regulations (state education standards). The content of the study program is topical. The aim and results of the studies are mutually compatible and do not contradict each other, and are sufficient. The courses are interconnected and complementary, they correspond to the objectives of the program, and they ensure the achievement of learning outcomes. The awarding of a degree is based on the achievements and findings of the relevant field of science.

Due to the rapid development of IT technologies, it is advisable to provide students with greater flexibility by means of optional subjects and subjects linked from practice (taught by external specialists).

AREA 1: CONCLUSIONS

AREA 1	Negative - 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. High demand for specialists in the industry of the region.
2. The overall study programme is designed to lead to the achievement of its objectives and of the stated learning outcomes.
3. The content of the study programme is topical and the content of the study programme generally meets the needs of the industry and the labour market in terms of technical knowledge and skills.
4. Emphasis on the practical focus of final theses.

RECOMMENDATIONS

To address shortcomings

1. Limited documentation within the self-evaluation report regarding some aspects of Area 1, i.e. mapping of aims, teaching/learning and assessment methods, alignment of the learning outcomes of the study field, programme and modules.
2. Insufficient level of learning content customization possibility
3. There is little opportunity for students to customise their studies by choosing optional subjects.

For further improvement

1. Consider applying Bloom's Taxonomy or a similar framework when assessing how individual study outcomes contribute to and fulfil study programme learning outcomes. CDIO (Conceive – Design – Implement – Operate) or similar educational framework may be used to achieve better-interconnected courses/modules
2. Consider providing wider possibilities for students in selection of elective courses, in order to make a study more personalised and giving flexibility to customise learning content according to the professional interests of students
3. Pay attention to developing soft skills (communication, presentation, understanding business). The level of soft skills was repeatedly mentioned during interviews with social partners as very important.

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

The college highly values the financing for the scientific production provided by the Lithuanian research board (LMT) and has a strategic vision for its efficient use.

In the administration level the support for scientific research is well defined: the college has rules to incentivise teaching staff for the research output. Those rules are well-communicated and applied for workload evaluation of the teaching staff, as the required number of lecture hours can be replaced by the time used for scientific research. However, the application of the strategic vision, how to increase the research output by motivating teachers to involve students is not yet efficient and might require creating an efficient action plan.

At the level of teaching staff, part of the teachers are involved in applied scientific research, their articles are based on experimental work with the involvement of social partner companies and published. The teaching staff has leading persons demonstrating a consistently increasing research output in the advanced international level (three academics inside the study field which cannot be named according to the GDPR). The majority of the research works are presented in the events organised by academic institutions of Lithuania, and involve high percent of staff involved in teaching the information systems field. The involvement is supported internally, as the faculty organises an annual conference and has an internal journal for publishing conference materials. The research topic of IS is increasing over years, also part of the staff publishes research in the education management area. However, the share of research works of the teaching staff related to the subjects taught is relatively small, which reduces opportunity of student involvement.

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

There is hardware, software and Internet of things appliances, available for each student during their study process and meeting research interests. The level of technical equipment conforms to industrial level in the area of business systems and networks. The business partners and alumni seem to be interested in the cooperation and intake of students for applied research during their practice and final thesis preparation period. However, the curriculum includes a broad scope of background subjects covering the IT area, whereas the latest development of science and technology are mostly reflected in the proposed selection of elective study modules - most of them include popular programming languages, analytics and AI which are considered to be a current industry standard. The optional access to the advanced subjects might hinder early acquaintance of the students to the latest developments and research, as well as readiness for career.

The links between science and studies are highly affected by the internationalisation aspect of the curriculum. Involvement in international research is related to confidence of lecturers for presenting their research in international events and delivering subjects in a foreign language at the faculty and abroad, as well as the students' willingness for internationalisation of their studies. However the motivation for international involvement was not expressed during the visit. The faculty provides evidence of curriculum internationalisation in the form of invited lectures for the subjects (standard and electives) by using the

support provided by Lithuanian Research council and Erasmus, and inclusion of teaching one subject in English (starting from 2024). The possibility of credits acquired abroad by Erasmus is intensively offered, but are not yet recognized as an advantage by students. Language skills of lecturers and students for enhancing confidence of international communication in research and studies could also add value to the international communication indicated as a highly demanded competence by companies of social partners.

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

The feedback results presented in the SER and during the meeting revealed a good communication atmosphere among the lecturers and students, also a possibility to use the current situation of small groups of students in class and responsiveness of teachers for meeting individualised interests, which might result in the successful joint research in future.

Despite the administrative initiative for research development, the current involvement of students in research is passive. Only a small number of students confirmed awareness of participating in scientific research activities and conferences. The initiative of involvement in the research comes from teachers in relation to topics proposed by social partners, but the motivation from students was not expressed for this activity. The potential of student research activities within the framework of the study modules or during preparation of the final theses is yet highly underutilised, the development of research skills is not actively included to the learning outcomes of study modules. There is no clear evidence of study subject content related to the research methodology and increasing research skills and competences of the teachers.

ANALYSIS AND CONCLUSION (regarding 2.1.)

The readiness of the faculty for strengthening links between science and studies is high due to the clear vision of the administration of supporting research activities. The strategic measures are proposed for using the research support provided by the Lithuanian Research council for motivating lecturers and students to get involved and provide research output.

Good potential of linking study content and latest developments in research is demonstrated in the area of applied research and implementing industrial research projects in the faculty due to strong links to the social partners and organisations (such as Chamber of commerce), preparation of final thesis based on real cases, good material basis, and planned international collaboration for project proposals. The revision of study subjects for including the latest developments and most advanced IT skills, as well as research -related study outcomes might ensure that the curriculum was linked to the latest developments in science.

The teaching staff has leading persons demonstrating and increasing research output in the advanced international level. However, only a smaller part of research works of the teaching staff is related to the subjects taught, which reduces opportunity of student involvement. The majority of the research works are presented in the events organised by academic institutions of Lithuania.

The moderate activeness of teaching staff and low participation of students in the research activities might require administration to elaborate an efficient action plan for implementing the long term vision of research output. The proposed motivational measures for student involvement in the research seem to be inefficient and not clearly communicated for building awareness and for actively using them. There is no clear evidence of study subject content related to the research methodology and increasing research skills and competences of the teachers.

There are good, but yet underutilised opportunities, such as formation of the researchers' group for joining teaching staff members, scientific society of students, and motivation measures for international participation. Although all of them are mentioned in the SER, the evidence of their importance and impact was not confirmed by the meeting participants.

AREA 2: CONCLUSIONS

AREA 2	Negative - 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. The readiness of the faculty for strengthening links between science and studies is high due to the clear vision of the administration of supporting research activities.
2. Good potential of linking study content and latest developments in research is demonstrated due to strong links to the social partners and organisations
3. The teaching staff has leading persons demonstrating and increasing research output in the advanced international level

RECOMMENDATIONS

To address shortcomings

1. The moderate activeness of teaching staff and low participation of students in the research activities might require administration to elaborate an efficient action plan for implementing the long term vision of research output
2. The revision of study subjects for including the latest developments and most advanced IT skills, as well as research-related study outcomes might ensure that the curriculum would be linked to the latest developments in science.

For further improvement

1. Language skills of lecturers and students for enhancing confidence of international communication in research and studies could have a synergistic effect and add value to the international communication indicated as a highly demanded competence by companies of social partners.
2. As the research is an emerging field in the universities of applied science of Lithuania, it is recommended to amend study subject content related to the research methodology and increase the research skills and competences of the teachers.

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

PANKO follows a standard procedure for admitting students to higher education institutions in Lithuania. The admission criteria and procedures are aligned with the general requirements set by the Ministry of Education, Science and Sports. The process is transparent, as admission criteria and procedures are publicly available on the Institution's website, panko.lt.

The self-evaluation report includes information regarding the number of applicants and signed agreements. Since the establishment of the program, the number of applicants has consistently increased. However, the number of the study contracts signed is rather unstable. The self-evaluation report does not provide information about the amount of students admitted to state funded and non-funded places.

The Institution provides an overview of the trends, indicating that despite the increasing number of applicants, fewer students manage to meet the general admission requirements. According to PANKO, insufficient preparation of entrants for studies also leads to student dropouts. Additionally, the experts find the low number of graduates compared to admitted students to be alarming. Even though the program is relatively new, it indicates that PANKO faces challenges in attracting the best students who could succeed in this field of study. During the visit it became evident that PANKO shows effort to improve the current situation by closely cooperating with PMC (Panevėžio mokymo centras) and social partners.

PANKO reports that over the last three years, the average competitive scores of students admitted to DMIS study program have been lower than the average score for all students at the same Institution. On the other hand, the information provided in the self-evaluation report implies that the average competitive score in the DMIS study program remained stable over time.

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

The principles of recognition of foreign qualifications, partial learning outcomes, prior learning and other learning are documented. PANKO relies on two descriptions of these procedures, which are publicly available on the Institution's website, panko.lt. Experts find the procedure to be clear and well presented.

The cases of recognition of results during the last three years are discussed in the self-evaluation report. According to PANKO, 21 students enrolled in the DMIS study program have requested to recognize their previously obtained qualifications. Out of them - 18 have previously studied either in Panevėžys College or other Lithuanian institutions, while other 3 students have obtained qualifications abroad. All of the requests were accredited.

ANALYSIS AND CONCLUSION (regarding 3.1.)

Student selection and admission criteria and procedures are adequate and transparent as they are in line with the general requirements set by the Ministry of Education, Science and Sport. The information regarding admission criteria and procedures is publicly available. Despite the increasing number of applicants, the rate

of graduation from the DMIS study program is alarmingly low. However, PANKO takes additional measures to combat this issue. The principles of recognition of foreign qualifications, partial learning outcomes, prior learning and other learning are documented and clear.

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

Opportunities for student academic mobility are available and strongly encouraged by the Institution. Panevežys College has exchange agreements with 27 universities. Students confirmed that they are frequently informed about Erasmus+ projects by email. Moreover, the information related to student academic mobility is available on Institution's website.

Even though students are aware of the opportunities for academic mobility, they show very little interest in participating. To address this issue, PANKO has conducted a survey in 2020. Respondents pointed out that the main reason behind low participation is insufficient financing. To encourage students, Panevėžys College offers an additional grant to those who go on the Erasmus+ exchange or practice.

In addition to financial challenges, low participation in mobility opportunities is also driven by students' fear to leave on their own. Furthermore, students pointed out that, in many cases, they are already employed during their studies, making it difficult to study abroad for a certain period of time.

It is evident that participation in academic mobility needs to be boosted, as only three students have taken part in exchange programs or practice over the last three years. However, addressing the challenges indicated by students is not straightforward. The institution should tackle these obstacles by offering not only financial but also moral support. Career consulting could be one of the solutions.

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

The self-evaluation report focuses on the academic support provided to students. It specifies that all students have a tutor-lecturer and mentor-student for a smoother adaptation process. However, the College did not quantify any other kind of support for students.

Experts found that information regarding financial support is available on the PANKO's website. Students from disadvantaged families are eligible to receive financial help which is provided by the government. No data regarding scholarships for academic performance was disclosed, however, during the visit we were informed that around 16 DMIS students receive a scholarship for their academic results. Students do not seem to be aware of any scholarships for scientific research projects, while PANKO's staff indicated that such projects can be funded.

In terms of social support, PANKO has students' representation which seems to provide an opportunity for students to engage in more activities within the Institution. Even though Panevėžys College does not employ a psychologist, students confirmed they are aware of the opportunity to receive psychological help. According to them, the contacts of a psychologist are available on the website, while the consulting is free of charge.

3.2.3. Higher education information and student counselling are sufficient

The College offers the usual onboarding procedure to integrate newly admitted students. After signing the contract, students receive an email with the most important information. During the first days of their studies, students are introduced to the PANKO's staff, systems used and assessment procedures. Experts were told that after the conclusion of every course, students receive surveys regarding the content and quality of the course. Students confirmed this information.

The self-evaluation report mentioned that students are introduced to The Centre for Studies, Career and Occupation. However, during the visit students claimed to have never met a career advisor. They specified that career related matters are usually discussed with their lecturers. Experts believe that given a low graduation rate, and little interest in participation in student academic mobility, PANKO must focus more on developing career planning services.

ANALYSIS AND CONCLUSION (regarding 3.2.)

To maximise learning progress, the student support system could be improved. While students have opportunities to participate in academic mobility programs, they show little interest, partly due to psychological obstacles. Students are not fully aware of the available funding opportunities, particularly those related to scientific research projects.

Establishing tutor-lecturer and mentor-student relationships, along with well-defined integration procedures, helps ensure that newly admitted students adapt smoothly to the new environment. However, career counselling appears to be a weak spot. Improving these services might help achieve a more efficient learning process.

AREA 3: CONCLUSIONS

AREA 3	Negative - 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. None.

RECOMMENDATIONS

To address shortcomings

1. Addressing a low graduation rate is crucial - the College must identify the reasons and focus on improving the current situation.
2. Empowering students to become more confident in participating in academic mobility programs.

For further improvement

1. More developed career counselling services.
2. Scholarships for the best students of DMIS funded by social partners.

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 teaching and learning process at Panevėžys College is structured to cater to students' needs, ensuring they achieve the intended learning outcomes. Small group sizes, a notable feature of the programme, offer advantages such as personalised attention, increased interaction and tailored feedback, enhancing the learning experience. However, they also pose disadvantages like limited peer diversity and potential over-reliance on a few perspectives.

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

Panevėžys College demonstrates a strong commitment to inclusivity and accessibility in higher education for socially vulnerable groups and students with individual needs. The institution's flexible study processes, dedicated support services, and adaptive resources ensure that all students can participate fully in academic life.

However, there are areas for improvement. While physical and informational adaptations are in place, ongoing assessment and updates to these resources are essential to keep pace with technological advancements and evolving student needs. Enhanced feedback mechanisms from students with special needs could further refine and enhance the support services offered.

ANALYSIS AND CONCLUSION (regarding 4.1.)

In conclusion, Panevėžys College effectively caters to student needs through structured teaching and learning processes, ensuring achievement of intended outcomes. The small group sizes provide personalised attention and tailored feedback, though they may limit peer diversity and perspective variety. The college is strongly committed to inclusivity, offering flexible study processes, dedicated support services, and adaptive resources for socially vulnerable groups and students with individual needs. However, continuous assessment and updates to these resources, along with enhanced feedback mechanisms, are essential to keep pace with technological advancements and evolving student requirements, further refining and improving the support services offered.

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

A quality assurance process is in place, with periodic internal assessments of study programs that involve stakeholders. However, there is room for improvement in this process. The college conducts its own student surveys, achieving a somewhat satisfactory response rate, but the communication of survey results to

stakeholders could be enhanced. Strengthening stakeholder engagement and improving information dissemination would further enhance the effectiveness of the quality assurance process and overall academic monitoring system.

4.2.2. Graduate employability and career are monitored

Panevėžys College systematically monitors graduate employability and career progression. However, statistical data does not specify how many graduates work in their field of study.

Data shows graduates are relatively successful in entering the labour market, though their salaries are below the national average. The absence of a dedicated career centre, mentors, or career fairs limits direct support for graduates seeking employment. Continuous improvement is needed to enhance salary outcomes, provide structured career support, and adapt feedback processes to evolving demands.

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

Panevėžys College has robust policies to ensure academic integrity, tolerance, and non-discrimination. Additionally, the small student count allows for more personalized attention, making it easier for teachers to monitor individual progress. Continuous efforts are necessary to adapt these policies to new challenges, ensuring a consistently inclusive and ethical academic environment.

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

Panevėžys College has established clear procedures for students to appeal and file complaints regarding the study process and examination procedures.

ANALYSIS AND CONCLUSION (regarding 4.2.)

In conclusion, Panevėžys College systematically monitors learning progress and provides regular feedback to promote self-assessment and learning progress planning. This process includes student surveys and stakeholder engagement, although communication of survey results to stakeholders could be improved for greater transparency and effectiveness. Graduate employability and career progression are also monitored, with data indicating successful labour market entry but lower than average salaries. The absence of a dedicated career centre or career fairs limits direct employment support. Robust policies ensure academic integrity, tolerance, and non-discrimination, with small class sizes allowing personalised attention to students. However, continuous efforts are needed to adapt these policies to evolving challenges. Additionally, clear procedures for submitting and processing appeals and complaints regarding the study process and examination procedures are in place, ensuring fair consideration of student grievances.

AREA 4: CONCLUSIONS

AREA 4	Negative - 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. None particular commendations for this area.

RECOMMENDATIONS

To address shortcomings

1. Organise career fairs and establish a dedicated career centre to provide comprehensive career guidance and job placement assistance

For further improvement

1. Collect and analyse employment data, ensuring consideration of whether graduates are employed in their respective specialities.

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 self-evaluation report provides an overview of the status of teachers, including the length of teaching experience and the length of practical work experience.

For some lecturers, knowledge of English at the B1 level is indicated. The length of teaching experience for some teachers is quite long. It is a question whether with subjects focused on IT technologies, where there is an extremely fast development of technologies, it is an advantage.

Teachers can plan what resources are necessary. The use of software and licences is managed through the IT centre.

The scope of employment (the number of hours taught per semester) is controlled, it is set according to the employment given in the contract. There are limits of students per class and a limit of supervised theses per teacher.

Student surveys - feedback - after a semester are discussed. There is a given procedure on how to apply changes if it is necessary.

College provides support for methodology of course content.

The school has declared support for the creation of startups in the case of the possibility of commercialising the innovations and ideas of students created during their studies or the solution of final theses.

The school management presented the existence of a new plan for “teachers renovation”.

ANALYSIS AND CONCLUSION (regarding 5.1.)

The range of teachers is adequate, but many lecturers are not full-time. Some teachers are listed as having a B1 level of English, which can be a problem when teaching foreign students.

The HEI declares the practical focus of teaching and the connection with requirements from practice, the flexibility of teaching IT technologies and the constant, continuous improvement of the expertise of lecturers and also the involvement of experts from practice in teaching must correspond to this.

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

The HEI supports teacher mobility and a selection procedure is defined. Teachers have the opportunity to travel for a teaching stay as part of Erasmus+.

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

College provides support for professional development of teachers. Financial support is provided for professional growth.

ANALYSIS AND CONCLUSION (regarding 5.2.)

We recommend establishing a clear procedure for the replacement of lessons in the event of teacher departure. If the school requires publications in the area of taught subjects and these publications are to be in valuable publication outputs (e.g. journals with IF), clear conditions must be set and specified from which sources of funding are possible.

AREA 5: CONCLUSIONS

AREA 5	Negative - 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. The range of workload of lecturers is controlled according to the scope of contracts.
2. KPI (for example, the number of required publications per unit of time) according to the workload;
3. Providing financial support for the professional development of teachers.
4. Teachers' mobility support.
5. Qualification of teachers is adequate.

RECOMMENDATIONS

To address shortcomings

1. Composition of teachers - substitutability in case of long-term or sudden absence.
2. The College supports (especially financially) for scientific work and publications of individual lecturers in the field they teach.
3. The College supports increasing the language competence of lecturers.
4. Involvement of experts from practice in teaching.
5. Process for dealing with lesson compensation (for example, during an Erasmus teaching stay).

For further improvement

1. Focus on teacher publications related to the field of courses.
2. Support for improving the foreign language skills of lecturers (English).
3. Fine-tuning the process of supporting professional development (including financial sources) and required publication outputs in relation to the taught subjects.
4. Set-up a clear process of teacher’s substitutability.

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

Self-evaluation report confirms that the material and methodological base of the College is sufficient to carry out the programmes of the study field of Information Systems. Five buildings, of almost 10000 sq.m. in total, with more than a half used for studies. All auditoriums and classrooms meet fire prevention, hygiene and health safety requirements; with wireless Eduroam internet connection available in all College buildings. All the buildings are adapted for the persons with special needs. The Information Technology Centre is in charge of the maintenance, interaction and upgrading of the information technology infrastructure of the College. 18 computer classrooms and laboratories, equipped with 240 computerised workplaces and necessary software ensure the high professional teaching/learning level for students in the field of Information Systems. The equipped laboratory complex strengthens the quality of the computer science, as well as applied research studies, creates favourable conditions for the development of students' professional competences and their involvement in scientific development. External funding (funding projects, income from industrial partners) is widely used for the development and maintaining of the infrastructure. However, there is a concern that group size (10 students minimum) would be sufficiently funded from traditional sources.

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.

For the sporting and leisure activities College has a spacious gym (519.02 sq.m.), adapted for student needs, as well as the AGORA student space and the Assembly Hall (185.12 sq.m.) for organizing events.

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

The upgrade of computer hardware and software is critical for the study field of Information Systems, because it became morally obsolete very quickly. Having a high level of current IT infrastructure, at the same time the equipment upgrade plan is not clearly described (both in SER and interview).

The Information Technology Centre is responsible for the maintenance, interaction and upgrading of the information technology infrastructure of the College. College is maintaining good cooperation with industry and plans to strengthen it and use earnings from industrial projects for future improvement of equipment. However, there is a risk that the program will not have enough resources for successful running if it lacks external fundings.

ANALYSIS AND CONCLUSION (regarding 6.1.)

The analysis herein is based on the information provided in the Self-Evaluation Report (SER, pp. 40-44) with the annexes to it, as well as in the interviews conducted during the visit and additionally provided documents. All above mentioned criteria are satisfied. No major shortcomings have been identified. However, some minor weaknesses have been identified.

The College has allocated all needed provisions (scientific, informative, material, technical and financial) such that the bachelor's program can be implemented efficiently and correctly. The funding of the programme seems to support the program implementation in this current form. However, the concerns exist related to the (a) size of study groups, (b) unclear IT infrastructure upgrade policy, and (c) enough resources for successful running of the programme if missing external funding.

AREA 6: CONCLUSIONS

AREA 6	Negative - 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. Sufficient facilities for the implementation of the study process, well-equipped laboratory complex, and easily accessible full-service library. The College premises are adapted to persons with special needs.
2. Good working cooperation with local industry providing sufficient number of internship/practice places for students, as well as opportunity for teachers to do traineeships at the industrial partners

RECOMMENDATIONS

To address shortcomings

1. Develop and implement IT infrastructures upgrade politics in line with the strategy of the College
2. Plan activities to increase the popularity of the study program in order to have sufficient traditional funding to maintain the resources needed for study process

For further improvement

1. Strengthen the cooperation with the industry, ensuring internships/practice for the students, traineeship for the teaching staff, participating in research and development activities and projects.
2. Consider expanding of R&D activities to the region, providing services for society and industry, based on the educational and research value of the study programme.

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 structure of field study management, decision-making process and the periodicity of internal assessment are described.

The structure is defined, human resources are allocated to effective management.

The internal QA is considered effective as it aligns with the strategic aims and action plan of the College, which is to carry out high-quality and competitive studies and to strengthen the College's partnership with the business and public sector. The QA process involves the Information Systems Study Programme Committee (IS SPC) which coordinates the implementation and improvement of the study programme, ensuring that the outcomes of study modules/subjects are compatible with the study and assessment methods, as well as the needs of the labour market.

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

During the site visit, the evaluation team has gathered evidences for inclusion of the stakeholders (students, social partners, employers) into the process of creating and improving study programs. Social partners, such as CTOs from relevant industries, provide industry insights and practical perspectives to ensure the programme's relevance to the labour market.

The team had got the impression local employers really care about the program and they do contribute to its quality.

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

Feedback is managed according to the Conducting Surveys procedure. Taking into account the results of the study, if necessary, the content of study programs, descriptions of subjects (modules), study schedule, and organisation of the study process are adjusted.

Information on the programme is available online. The Guide to Internal Quality Assurance Systems for Studies is published and available online (latest change in 2022, version 5). It contains all required content, it is a clear document. All other related documentation is also available online, no issues were found.

During the visit, it was observed that some interviewers were not aware of the public available reports.

7.1.4. Student feedback is collected and analysed

Student feedback is collected through surveys organised by the Information Systems Study Programme Committee (IS SPC). Students and graduates provide comments on the consistency and coordination of the modules/subjects, as well as feedback on professional and key competences relevant to the labour market. The IS SPC then analyses this data and takes into account the comments while updating the study programme.

The National Student Survey app (NSA) is not utilised which is more related to wider (national) problems with running the app. The college collects and summarises the students' opinions on their own.

This feedback is considered in the QA process to improve the quality of studies. The program ensures that student surveys are conducted periodically, their results are analysed and discussed, and a plan is drawn up and implemented to improve the quality of studies.

ANALYSIS AND CONCLUSION (regarding 7.1.)

The analysis herein is based on the information provided in the Self-Evaluation Report and the annexes to it, as well as in the interviews conducted during the visit and additionally provided documents.

There are no specific shortcomings to be eliminated.

Overall, the internal QA is depicted as a comprehensive and responsive system that actively involves multiple stakeholders to maintain and enhance the quality of the study programme.

AREA 7: CONCLUSIONS

AREA 7	Negative - 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. The internal Quality Assurance System is a clear one.
2. Stakeholders' involvement was evident from the interviews made.

RECOMMENDATIONS

For further improvement

1. During the visit, it was observed that students were not aware of the public available reports. They also could not report of the effectiveness of the student feedback. The institution should make it clear if the student feedback was heard (or not heard), why (not) and what were the consequences.
2. The stakeholder's involvement in the improvement of the program could be detailed.
3. The college should check if they really meet the ISO 9001:2015, ISO 21001:2018 and ISO 14001:2015 requirements (see Manual on the Internal QA System, p. 3-5). If they do, it is advised they get certified. If not, they should consider removing the statement on the compliance of any ISO standards.

V. SUMMARY

Panevėžio kolegija (hereinafter – College) is a state higher education institution established in 2002. Information Systems studies are carried out at the Faculty of Technological Sciences. The study programme Development and Maintenance of Information Systems (hereinafter DMIS) has been registered in the field of Information Systems.

The DMIS study programme is the first-cycle college study programme of the field of Information Systems, which awards the professional bachelor's degree in Computer science.

The aim of the study programme and the defined study learning outcomes meet the requirements of the Study Cycle Description (2020) and the Computer Science Study Field Group Description (2022).

The self-evaluation report did not do its best in describing the real situation with the study program, as it does not contain enough information about important aspects. However, required additional documents were obtained promptly.

The programme aims and learning outcomes are well aligned with the needs of the society/labour market.

The involvement in scientific research is not well balanced in all levels: in the administration level the support for scientific research is well defined, the teachers are motivated for their research, the requirements for teachers for quality and quantity of their research output are formalised and acknowledged, but the involvement of students is not intensive: small number of students is aware of the possibilities for participating in scientific research projects and conferences.

The number of graduates is rather small. While there are external factors affecting the situation, the institution should think of implementing changes in order to improve it. As an example, more developed career planning services could be offered.

There is a QA process in place, there are periodic internal assessments to the study program. Stakeholders do participate, but this process could be further enhanced. The institution is conducting surveys among students on its own, the response rate is somehow satisfactory. The informing of the stakeholders could get some improvements.

The evaluation group did not find any obstacles that would object to the continuation of the study program, that is there are no substantial shortcomings to be eliminated.

The evaluation team wants to thank the HEI for their efforts and for engaging in discussions with the review panel.