UNIVERSITY OF PRISHTINA "HASAN PRISHTINA"

Computer and Software Engineering
Master of Science

Re accreditation

REPORT OF THE EXPERT TEAM

26.03.2024, Prishtinë

Table of Contents

1. INTRODUCTION

1.1. Context

Date of site visit: 26.03.2024

Expert Team (ET) members:

- *Dr. Seifedine Kadry*
- *PhD Cand. Damian Michalik*

Coordinators from Kosovo Accreditation Agency (KAA):

- *Shkelzen Gerxhaliu, Director of Department for Monitoring and Post-Accreditation Procedures*

Sources of information for the Report:

- *The Manual for External Evaluation of Higher Education Institutions*
- *Self-evaluation Report*
- *Syllabi of the courses*
- *CV-s of the academic staff*
- *University strategic plan*
- *Faculty strategy*
- *Student Statistics for recent years*
- *External Review Report*

Criteria used for institutional and program evaluations

- *Standards & performance indicators for external evaluation according to the KAA Accreditation Manual - Updated 2021*

1.2. Site visit schedule

Time	Meeting	Participants
09:00 – 09:50	*Meeting with the management of the faculty where the programme is integrated*	*Isak Shabani* *Qamil Kabashi* *Milaim Zabeli* *Bujar Krasniqi*

09:55 – 10.35	*Meeting with quality assurance representatives and administrative staff*	*Besnik Loxha* *Dhuratë Hyseni* *Qerim Behrami* *Vlora Shileku* *Rreze Rudi*
10:40 – 11:50	*Meeting with the heads of the study programme*	*Avni Rexhepi* *Valon Raça* *Qefsere Doko Gjonbalaj* *Isak Shabani* *Artan Mazrekaj*
11:50 – 12:50	*Lunch break*	*-*
12:50 – 13.40	*Visiting Facilities*	*-*
13:40 – 14:30	*Meeting with teaching staff*	*Blerim Rexha* *Kadri Sylejmani* *Lule Ahmedi* *Lavdim Kurtaj* *Besmir Sejdiu* *Vigan Raça* *Labeat Arbneshi* *Mergim Hoti* *Blendi Arifaj* *Dalina Vranovci* *Adrian Ymeri* *Arbena Musa*
14:35 – 15:20	*Meeting with students*	*Roni Kukaj* *Dea Rexha* *Florian Saqipi* *Alba Thaqi* *Erina Blakiqi* *Eriona Mustafa* *Ndriçim Halili* *Qlirim Hoti* *Valeza Grainca* *Desara Qerimi* *Elsa Krasniqi* *Avdyl Krasniqi* *Puhizë Doçi*
15:25 – 16:10	*Meeting with graduates*	*Ardit Baloku* *Nderon Hyseni* *Eni Azemi* *Vigan Dika* *Rinor Ahmeti* *Andi Ahmeti* *Zana Guda* *Erna Hulaj* *Dredheza Braina*
16:15 – 17:00	*Meeting with employers of graduates and external stakeholders*	*Vjollca Qavolli* *Albert Aliu*

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		Elton Bellopoja *Rilind Mehmeti* *Vigan Abdurrahmani* *Nue Nikolla* *Drin Zeqiraj* *Valdete Zenuni*
17:00 – 17:15	*Internal meeting of KAA staff and experts*	-
17:15 – 17:25	*Closing meeting with the management of the faculty and program*	*Isak Shabani* *Qamil Kabashi* *Milaim Zabeli* *Bujar Krasniqi*

1.3. A brief overview of the institution under evaluation

The University of Prishtina "Hasan Prishtina" stands as the oldest and largest institution of higher education in Kosovo, comprising 14 academic units with over 28,500 students, 1,450 academic staff, and 275 administrative support personnel.

The institution's vision emphasises quality assurance in higher education, alignment of study programs with labor market needs, and support for international mobility within EU exchange programs. Additionally, the University aims to enhance cooperation with European higher education institutions and promote research crucial to Kosovo's scientific, cultural, and economic development.

Established in 1961, Faculty of Electrical and Computer Engineering (FECE) operates within the University of Prishtina "Hasan Prishtina," focusing on contemporary and innovative education. With approximately 1951 active students and 38 full-time academic staff, FECE offers Bologna Declaration-aligned study programs in various fields of engineering.

FECE provides 7 Bachelor's and Master's degrees in Electronics, Automation and Robotics, Computer and Software Engineering, Information and Communication Technologies, Power Systems, and a PhD in Electrical and Computer Engineering.

The Information and Communication Technologies master study program was accredited in 2021 for three years and was confirmed as being substantially compliant with the standards, with a number of 40 students to be enrolled in the program.

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2. PROGRAM EVALUATION
2.1. Mission, Objectives and Administration

The University of Prishtina mission is focused "on academic development, scientific and artistic research, and the provision of higher education through programs of strategic and developmental interest to the Republic of Kosovo. The University enables the mobility of programs, students, and academic staff on an ongoing basis, intending to reach the international level and competition in the market."

In the strategic plan implemented for years 2023-2025, the university set the following objectives:

- Increasing the quality of teaching and learning
- Advancement of science, innovation and connection with the labour market
- Improving the position and role of UP in the international scene
- Digitization and improvement of physical infrastructure
- Strengthening governance, integrity and financing

The strategic plan also includes KPIs which allows representatives to monitor the university progress. Even though the university mission and strategy plan do not specify any study fields, the extended FECE strategy clarifies the scope of the study programme. Therefore, RT considers that both strategy and the study programme are aligned to the mission statement of the university.

The expected learning outcomes are developed in accordance with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. The faculty presented adequate mapping to qualifications and explained that the study programme content was based on experience of other universities, i.a.: University of Zagreb or University of Vienna.

The study program has an applied research focus: students have opportunities to be engaged in research projects, current research findings are included in course materials, and an emphasis is put on the development of research skills. Student centricity and market orientation were stated as the overarching principles, however further development in terms of swift and reliable cooperation with the labour market should be considered.

The university's policies cover a wide range of topics, including accreditation standards, regulations on studies at all levels, quality assurance, academic mobility of students, and disciplinary procedures for academic staff and students, among others. The university also has guidelines on academic ethics, official and archival management, and protection of whistleblowers. All these documents are publicly available.

The University's Code of Ethics serves as a guiding framework for the behaviour expected from all university affiliates, including students, staff, and faculty members. It details essential principles and values, and regulates issues such as plagiarism, academic misconduct, conflicts of interest, and harassment. In addition, the University has instituted entities like the Quality Assurance Committee, with responsibilities that include enforcing compliance with these regulations and probing any suspected infringement.

The Faculty Council periodically reviews faculty decisions at least annually or as required by changing conditions. Specific policies at the University of Prishtina, such as the Regulation on Master Studies and the Regulation on Selection and Appointment of Academic Staff, have been revised multiple times to enhance administrative procedures and research standards, respectively.

Even though the university established strong relationships with external stakeholders from various industries (industrial board of FECE) and started closer cooperation with the University of Iowa (USAID Mission) there is still room for improvement recognized by RT on the meeting with industry representatives. As in general public universities are not as swift as private ones in readjusting their activities to the latest technological trends and transferring scientific outcomes to the labour market. It is essential to enhance internal processes to cover gaps between current academic curricula and the rapidly evolving technological landscape, and extend involvement in transferring intellectual property to the local business sector.

Compliance level: Fully compliant

ET recommendations:
1. *Strengthening collaboration between industry and FECE to furtherly improve the study programme and significantly contribute to the further development of local society.*

2.2. Quality Management

The formal system at the University of Prishtina encompasses a Regulation on Quality Assurance and Evaluation approved in 2016. This regulation also defines the role and responsibility of organisational and academic units at the University of Prishtina for carrying out quality assurance and evaluation activities. According to the Quality Assurance Regulation, the quality assurance processes cover a number of issues – teaching quality, services for students, scientific activity, international cooperation and resources. According to the SER, there are four types of quality evaluation instruments – academic staff questionnaires, questionnaires for course evaluation, administrative staff questionnaires and student questionnaires. There is a structure at the central level that explains the formal responsibilities

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of all parties. The evaluation process is administered at the central level but executed on the faculty level.

While the expert team is aware of the diverse practices at the University of Prishtina, despite the common regulations, the expert team would like to commend FECE and the university central management for successful cooperation in preparing the documentation relevant for accreditation. While the report could benefit from more analysis and self-reflection, the documents have been well arranged, the course descriptions follow a unified template and the self-evaluation report is accurate.

The FECE Strategic Plan 2021 – 2023, extended 2024 – 2025 lists a separate action line on Quality assurance and accreditation. The action line includes 9 strategic objectives – improving of teaching and learning in order to develop student competencies, quality of self-assessment reports, student scoring system, establishment of scholarships for short periods for conducting research visits abroad, doctoral programs at FECE in accordance with the Bologna system, improving the quality of teaching, learning and research activities at FECE, expanding FECE's relations with the labour market and civil society, involvement of students in quality improvement and increase quality performance. The Strategic Plan includes several indicators for each strategic objective, however, it is not fully clear how these indicators are monitored. It would be important to monitor their achievement on a regular basis and also report within and after the timeframe of the strategy execution.

The University of Prishtina Statute states that the evaluation of teaching, scientific research, and artistic work of staff shall be conducted in the following manner – internal evaluations through self-evaluation, questionnaires and self-evaluation conducted by academic staff, anonymous questionnaires of evaluation by students, analysis of parameters based on performance reports. The FECE Strategic Plan includes a related task and activity – development of mechanisms for receiving feedback from students and employers (survey, alumni, etc.) and survey with students (through online tools), employers and graduates (alumni), in order to receive feedback on the quality of teaching and learning at FECE. Recently, the centre for Alumni UP of the graduates was established within the University of Prishtina to maintain the link and correspondence with the graduates. This centre distributes two questionnaires – a questionnaire for graduates to evaluate the completion of the study program and the questionnaire for employers to assess the knowledge and the gaps of students who graduated from a specific study programme. The surveying of graduates and employers is, however, a very recent practice and not yet regular and embedded. On the faculty level the feedback from graduates is collected informally, mostly regarding the courses that could be included in the study programme. There is an Industry Advisory Council that functions on the level of faculty that is asked for input on these matters.

The first public reports on the results of surveys have been produced only very recently. It would be very important for the summary reports on employer and graduate feedback (but not

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limited to) to be produced at the FECE level to allow for the faculty community to get a clear overview on the faculty performance and allow for immediate translation into improvement actions.

FECE claims that the results generated on the basis of all evaluations are an integral part of planning for the next academic year in order to increase the quality. The quality assurance processes cover – programme planning, teaching and assessment, environmental conditions and resources, student feedback and evaluation, student assessment and feedback, professional development of staff, continuous programme review, monitoring of results and changes. The plans on implementation of expert recommendations are produced after each external evaluation and the expert team receives the examples of these reports. The expert team studied the summary reports produced on the university level. One sample was based on the feedback from academic staff, administrative staff and students. It contained a thorough analysis and a number of recommendations/ suggestions. However, it was not fully clear how these recommendations are further translated into actions and how their implementation is monitored.

SEMS is used to collect real-time information on student achievements. The information on course completion and student progression is registered there. Based on the external reports on the previous programmes, the expert team was concerned about the overall time it takes for a student to graduate from a study programme in FECE and the so-called "inactive" students. The bachelor programmes currently implemented by FECE are formally new and have been significantly revised compared to the previous ones and the first graduates are expected for 2024. However, the expert team urges FECE to monitor the situation of student progression closely and take actions in order to reduce the dropout.

It is understandable that the mission of the university is to provide quality education to its students and not necessarily accommodate the needs of working students at the bachelor level. However, in the IT sector working students is a global tendency and the . The expert team learned that on the master's level the lectures are organised in the afternoon/ evening and this is the major reason that enables the students to attend. However, on the bachelor's level the expert team did not feel that this issue was sufficiently explored and that all possible actions by FECE are being taken.

The student survey has become mandatory at the University of Prishtina. Until then, there was a low response rate to student surveys. However, the hesitation of students to provide meaningful and/or critical feedback through these surveys exists and the students, especially on master's level where there are smaller student groups, prefer other ways of communication, for example, a direct conversation with a professor.

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However, despite the remarks made in the analysis above, overall it is visible that there is a culture of continuous improvement at FECE that is reflected in formal documents and reports and also maintained in practice.

Compliance level: Substantially compliant

ET recommendations:
1. *To perform analysis on the implementation of the FECE Strategic Plan and monitor the indicators related to all strategic aims;*
   CSE staff - response to this recommendation: the institution has agreed to establish a Monitoring and Evaluation (M&E) team comprising experienced academic staff tasked with overseeing plan implementation and monitoring strategic indicators, that will include the following activities:
   - Assess plan objectives and align with measurable indicators;
   - Outline KPIs, data collection methods, frequencies, and reporting mechanisms;
   - Set up systems for accurate data collection, storage, and management;
   - Track progress, analyze trends, strengths, weaknesses, and areas for improvement;
   - Share monitoring findings with stakeholders (i.e. office of the rector, office of the dean, council of the faculty, industrial board, etc.) through clear, concise reports;
   - Periodically evaluate plan effectiveness, incorporate lessons into future efforts for strategic planning.

2. *To produce summary reports on the feedback from academic staff, administrative staff, students, employers and graduates not only on the University level but also on the FECE level specifically;*
   CSE staff - response to this recommendation: the institution has agreed to coordinate with the rectorate and UP management to create necessary functionality in SEMS for specific summary reports on feedback regarding recommended issues. The plan includes the following activities:
   - Set up channels to collect feedback from stakeholders (academic staff, administrative staff, students, employers and graduates) through surveys, interviews, and focus groups;
   - Determine specific areas for feedback, such as teaching quality, administrative processes, student services, career readiness, and alumni experiences;
   - Create standardized templates tailored to stakeholder needs, ensuring clarity and simplicity;

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- *Schedule annual intervals for collecting feedback to ensure ongoing improvement, considering different timelines for each stakeholder group;*
- *Aggregate and Analyze Feedback: Compile data into summary reports, using qualitative and quantitative analysis to identify trends and areas for improvement;*
- *Generate FECE-level reports, highlighting key findings and actionable insights;*
- *Share reports with relevant stakeholders, ensuring transparency and accessibility of feedback results.*

3. *To ensure that the suggestions included in the summary reports result in certain actions for improvement and that their implementation is monitored.*
   CSE staff - response to this recommendation: the institution has agreed to organize meetings to discuss feedback findings, prioritize action items, and involve stakeholders in developing strategies; track implementation of action plans, assess their impact, and monitor feedback trends to align with stakeholder needs; solicit feedback on the collection process and make adjustments to improve participation rates, data quality, and reporting effectiveness.

4. *To complement the recently introduced practice of surveying employers and graduates with certain actions at the FECE level, either by directly receiving the data collected on the central level or by introducing complementary activity on the FECE level, to get immediate and up-to-date feedback.*
   CSE staff - response to this recommendation: the institution has agreed to implement surveys during the internship phase, establish regular consultation sessions with the industrial advisory board and utilize surveys during the preparation phase of the study program for the upcoming accreditation cycle.

5. *To take a close attention to student progression and drop-out rates in all FECE programmes, in particular on the bachelor level, in order to investigate the reasoning and prevent drop-out;*
   CSE staff - response to this recommendation: the institution has agreed to collect data on student progression and dropout rates for bachelor and master programs, identify common risk factors associated with student dropout, such as academic challenges, or lack of engagement, develop targeted intervention strategies to address the identified risk factors, enhance communication channels with students and collaborate with faculty, staff, students, and relevant stakeholders to develop and implement dropout prevention initiatives collaboratively.

6. *Explore additional tools for obtaining quality and meaningful feedback from the students.*

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CSE staff - response to this recommendation: the institution has agreed to explore additional tools such as online feedback platforms, interactive polling systems, focus group discussions, and peer-to-peer feedback mechanisms to enhance student feedback quality.

2.3. Academic Staff

The Faculty of Electrical and Computer Engineering (FECE) at the University of Prishtina has a qualified academic staff that is continuously engaged in the process of education and advancement in accordance with the needs of certain study programs. The academic staff undergoes training at the UP Center for Teaching Excellence to improve the quality of teaching, which includes active learning techniques, curriculum and syllabus design, presentation and communication skills, assessment methods, teaching theories, technology in education, and differential learning. All professors are expected to contribute to the field of research, and to facilitate research, the University of Prishtina provides several instruments of support, including co-funding for research projects with EU-sponsored initiatives, grants for attending scientific conferences, financial rewards for publications in world-renowned journals, and training and seminars. Moreover, UP-FECE participates in various Erasmus+ projects. In addition to teaching and research activities, all full-time teaching staff have responsibilities to be part of one or more academic communities.

3.1 The central governing institution (UP) periodically issues a public call for open full-time positions for all academic units. Academic units propose a list of positions to be opened as part of their annual human resources and capacities review. The public call provides a detailed description of the available positions, including their type, selection criteria, employment conditions, and relevant administrative procedures. The workload for all full-time employees is 40 hours per week and is balanced between teaching, research, and administrative activities. Teaching and exam requirements are also specified, as well as open consultation requirements and participation in various faculty forums and committees. A portion of the remaining working hours is devoted to research and supervising master and bachelor theses.

Legal requirements set for teaching staff are met. As per Table 3 and staff CVs, the academic staff do not cover, within an academic year, more than two teaching positions.

Per the SER, the study program has 14 full-time and four part-time employees, and full-time CSE program staff covers more than 90% of lectures and labs.

The CSE master's study program has 180 ECTS and a dedicated team of 14 full-time academic staff who are responsible for teaching various courses across different semesters of the program. Nine full-time with a PhD degree in the domain of computer science/engineering.

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The university has a Center for Teaching and Excellence to train teaching staff. Experienced professors train younger colleagues. International experts organize training on enhancing teaching and assessment methods, creating syllabuses, and writing learning outcomes. There are six regular meetings where experienced teaching staff present their experience in teaching. Newly employed teaching staff must take two courses on improving teaching methods. Teachers must attend at least two workshops/trainings between promotions or before signing a new contract.

The faculty is involved in various community services such as serving on the boards of national organisations, government institutions, and the Ministry of Education. During the visit, staff mentioned several additional activities during the meeting, which often involve student participation.

The Rectorate is in charge of assessing the teaching staff, and this is conducted at the conclusion of each semester using questionnaires that are available on the SEMS (Electronic student management system) platform. It is worth noting that there are no questionnaires specifically designed for conducting evaluations of peers or superiors.

The University of Prishtina's Center for Teaching Excellence has two courses available to improve teaching and assessment skills. One of the courses covers fundamental teaching aspects, including presentation skills, assessment methods, interactive teaching methods, and syllabus design. The other course provides more advanced training materials for master's and PhD-level teaching professors. It is mandatory for professors seeking promotion to complete these courses. Additionally, the academic staff is continuously trained through various national and international projects to advance their teaching skills, create contemporary teaching materials, and use teaching tools.

There are no retired full-time teachers. "Upon reaching age 65, all full-time employees are required to retire on the upcoming September 30th."

Compliance level: Substantially compliant

ET recommendations:
1. *Given the importance of peer assessment and collaboration with superiors to improve the study program in general, regular evaluation and support measures should be established and implemented for academic staff. This includes conducting personal development interviews with their peers and superiors on an annual basis. Student evaluation results do not influence academic staff evaluation.*

2.4. Educational Process Content

The Master's program in Computer and Software Engineering equips students with a comprehensive set of skills in computer engineering, software engineering, and soft skills. Topics include Advanced Algorithms, Software Analysis and Design, and emerging

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technologies such as Cloud Computing, Artificial Intelligence, and Machine Learning. The program offers flexibility, allowing students to tailor their curriculum to their interests and career goals. Graduates will be well-prepared for careers in the technology industry. The study program is based on ACM CE2016, which is good for having the international competencies of computer engineering in place. Still, the ACM CC2005 needs to be included for software engineering competencies. The study program identifies its objectives and learning outcomes but needs to include two important abilities: the main abilities that an engineer must possess. The first is the ability to make informed judgments that consider the impact of engineering solutions on global, economic, environmental, and societal contexts. The second is working effectively in a team, providing leadership, creating a collaborative and inclusive environment, establishing goals, planning tasks, and meeting objectives.

This study program derived 70% of its curriculum from top European universities, ensuring compatibility with EU markets. The courses combine local market needs with tangible goals and skill acquisition. All courses are fully weighted according to the European Credit Transfer and Accumulation System (ECTS), allowing easy credit transfers to other European universities. The study program complies with the National Qualifications Framework and the Framework for Qualifications of European Higher Education.

The master's program in Computer and Software Engineering is designed with a logical progression of coursework that begins with foundational concepts. The program is advanced and aims to equip students with skills in software design, programming, and advanced algorithms. Its primary focus is on developing and implementing software systems and technologies. The goal is to give students a comprehensive understanding of computer and software engineering principles. The study program has 11 learning outcomes.

The syllabi submitted in electronic form include all the required components and provide sufficient details to comprehend the content and other aspects of the subjects.

The language in which the MSc study program will be offered is Albanian.

During the first class, the teacher outlines the course syllabus and seeks student feedback. Using course evaluations, the teacher makes necessary adjustments to meet students' needs and expectations. From the discussion with students, the student-teacher relationship seems to be a partnership.

Teaching strategies vary for courses with different levels of complexity. Fundamental courses use classical teaching methodologies and tests, while advanced classes use a mix of teaching methodologies and either a fully continuous assessment or a mixed approach. Assessment for lab work, projects, and homework assignments is valid for up to two years and combined with the final content-based evaluation for grading.

Assessment methods for each CSE course are communicated on day one. The syllabus outlines specific methods aligned with learning objectives. SEMS provides additional evaluation methods.

UP's grading system requires a passing grade of six, which requires an overall evaluation of at least 50%. The grade is increased up to a maximum of 10 with each 10% increase in the overall evaluation, achieved with at least 90% in overall evaluation but not more than 94% in specific subjects. The system ensures consistent standards and comparability with other institutions.

Policies and procedures have been implemented in the FECE to address situations where student achievement standards are insufficient or inconsistently evaluated. These policies and procedures include routinely examining grade reports through the SEMS (Student Electronic Management System).

The study program has a mandatory course called Internship Innovation Project, a practice stage program for students. The syllabus of this course identifies the learning outcomes. The study program partners with industry stakeholders to provide students with practical work experience for at least 125 hours over three months. The program staff guides students through the process and supervises the entire program. The program offers ETCS credits to students as recognition of their work and helps them build their academic credentials alongside their practical experience. The program monitors students' work through activity reports to ensure accountability.

The university faculty has formed strong alliances with nearby businesses, hiring numerous alumni and interns. During the meeting with company representatives, it became clear that they had a thorough understanding of the curriculum, allowing for in-depth discussions regarding relevant issues related to the program.

Compliance level: Substantially compliant

ET recommendations:
1. *Not only the ACM CC2016 recommendation but also the ACM CC2005 recommendation must be included in the curriculum to cover software engineering competencies.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that Based on expert recommendations, alongside those from ACM CC2016, we will incorporate suggestions from ACM CC2005 into the curriculum to comprehensively address software engineering competencies.

2.5. Students

Student admission follows a transparent process through a public call for admission. This call specifies the admission criteria, which all candidates must meet to be eligible for application. The number of students to be admitted is determined by the department and subsequently approved by the faculty council and university senate, by the limits set by the Kosovo Accreditation Agency. Preliminary results are then published on the faculty webpage, providing transparency to all applicants.

Candidates dissatisfied with the results can file a complaint within a specified deadline, ensuring accountability and recourse in case of grievances. To facilitate a smooth admission process, an admission committee is proposed by the department and approved by the faculty council. This committee oversees the entire admission process, including result publication, ensuring that the admission procedure is conducted fairly and consistently for all applicants (https://apliko.uni-pr.edu/).

Candidates are eligible to apply if they have completed a bachelor's degree with either 240 ECTS credits (equivalent to four years of study) for master programs with 60 ECTS credits, or 180 ECTS credits (equivalent to three years of study) for master programs with 120 ECTS credits. This requirement ensures that students have attained the necessary academic background to pursue advanced studies at the master's level. Additionally, candidates who have completed their bachelor's studies abroad are also eligible to apply, provided that their diploma has been recognized by the Ministry of Education, Science, and Technology (MEST) of the Republic of Kosovo. This provision ensures that students from diverse educational backgrounds can pursue master's studies at the university, following MEST regulations.

The university's program establishes specific size limits for study groups: a maximum of 35 students for lectures, 20 for numerical exercises, and 15 for laboratory sessions. These limits ensure an effective teaching and learning environment, facilitating interaction and personalised attention, in line with the standard's requirements. During the on-site visit, laboratories and classrooms were inspected, and the available seating capacity for student groups was checked.

Assessment of student knowledge is conducted through various methods including exams, colloquia, seminar papers, practical tests, and project presentations. Exams are typically organised by course professors and teaching assistants within specified exam terms (January, June, and September).

Students receive prompt and continuous notification of their exam results through SEMS, the FECE website, or emails. They are also encouraged to request individual sessions with professors if they have concerns or uncertainties about their evaluation. In case of disagreement with the assessment, students have the right to file a written complaint to the Dean of FECE.

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This may prompt the exam to be reviewed by a commission appointed by the faculty council, ensuring fairness and transparency in the assessment process.

Utilising the SEMS electronic platform (https://sems.uni-pr.edu/), student performance in various courses is meticulously recorded and confirmed at the end of each semester. This platform serves as a central repository for all student records, ensuring accessibility to administration, faculty, and university management. Transparency and accountability are prioritised through the availability of records, allowing stakeholders to verify student achievements and progress. Moreover, the university sets clear completion requirements for students, mandating the fulfilment of all obligations, successful completion of master study program courses, and a satisfactory thesis defense. Upon meeting these requirements, students are awarded the title of 'master of science,' signifying their proficiency in their chosen field of study.

The university ensures that students can complete their studies within a reasonable timeframe, typically within four years, known as the double period of the study duration. However, recognizing that unforeseen situations may arise, the university grants students the option to extend their study duration in special cases. Should a student be unable to fulfil all study obligations within the prescribed period, they have the right to request an extension of one or two additional years. This request must be justified and submitted to the faculty council for consideration.

Upon review, if the faculty council deems the request to be valid, the student's study duration is extended accordingly. This flexible approach acknowledges the diverse circumstances students may face and ensures that they are provided with the necessary support to complete their academic endeavors.

Records are stored in SEMS and analysed at the department level. If a course exhibits low completion rates, the professor meets with the department head to address underlying issues and devise improvement strategies. This analysis also extends to the program annually, ensuring proactive measures to enhance overall educational quality and student success.

Within the faculty measures are in place to safeguard the integrity, quality, and ethical aspects of research and academic submissions. Ethical and disciplinary commissions operate at the faculty level to address any suspected violations, ensuring thorough review and appropriate action. Furthermore, the University of Prishtina, in conjunction with MEST, has established a system for detecting plagiarism. This centralised system aids in identifying any instances of duplication or potential abuse by students.

Despite the fact that the staff at FEIK is equipped with approximately 20 licences for the web platform plagiarism check (https://plagiarismcheck.org/), which assists in detecting similarities

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in submitted work and generating unbiased results, they do not have software prepared for the rapidly growing field of artificial intelligence.

The university informs students promptly about their rights and relevant procedures, outlined in the university statute available on the website (https://uni-pr.edu/desk/inc/media/661032D5-33DD-4CD6-B20F-BFE0AB89FB98.pdf). Student interests are represented through bodies like the Student Parliament and Student Council (https://uni-pr.edu/page.aspx?id=2,15), allowing them to voice concerns and participate in decision-making processes.

According to the University of Prishtina's statute, students have the right to transfer between study programs if they pass at least 50% of relevant courses in their previous program. To initiate a transfer, students must submit a request to the study committee of the faculty where they wish to continue their studies, along with evidence of meeting the transfer criteria. The faculty council, upon recommendation from the study committee, decides on transfer requests. These regulations also apply to students transferring from other universities to the University of Prishtina. Transfer procedures adhere to standard legal and statutory provisions, with special provisions in place for transferring ECTS credits.

At the faculty, these requirements are met through structured processes. During the initial lecture of each course, teachers provide students with the course syllabus and the schedule of consultation hours. This schedule is not only published on faculty's website but also displayed at the entrances of faculty staff offices, ensuring easy accessibility for students (https://sems.uni-pr.edu/OrariLU).

In addition to scheduled consultation hours, students are actively encouraged to approach teaching staff for any relevant requests or needs. This open-door policy fosters a supportive learning environment and facilitates student-teacher interaction. Furthermore, to accommodate special cases or students' preferences, consultations can also be conducted online upon request.

Compliance level: Fully compliant

ET recommendations:
1. *The career centre should be focused specifically on the faculty rather than being generalised for the entire university.*
2. *Continue improving the plagiarism detection system and update it with artificial intelligence (AI) technologies.*
3. *Integrating a psychological counseling service and actively promoting the importance of mental health awareness.*

2.6. Research

The program of study for Computer and Software Engineering at the MSc level has set scientific research targets that correspond with the research aims of the Institute of Electrical and Computer Engineering and the Faculty of Electrical and Computer Engineering. These targets are incorporated in the Faculty's biannual strategic plan that outlines the budgetary and logistical requirements needed to accomplish these goals. The most recent strategic plan for the Faculty of Electrical and Computer Engineering, which covers the period of 2021-2023, has been extended to 2025.

The work contract, Statute of the University, and Regulation on the Selection Procedures Related to the Appointment, Reappointment, and Promotion of the Academic Staff at the University of Prishtina "Hasan Prishtina" define the expectations for teaching staff's involvement in research and scholarly activities and specify their performance about these expectations.

The University of Prishtina's regulation on selecting, appointing, reappointing, and promoting academic staff specifies the standard of acceptable research work. The regulation excludes papers submitted to journals listed under Beall's list and only accepts papers published in journals listed by Thomson Reuters Web of Science and Elsevier's Scopus as research work. The academic staff receives different points in their selection and promotion procedures based on categorizing the indexes. The indexing system provides a clear and objective standard for evaluating the quality and impact of research work.

The CSE core staff is actively engaged in research and contributing to their respective fields. Their research areas include information security, data engineering/data science, theory and application of algorithms, distributed systems and cloud computing, and parallel architectures and parallel computing. Through their research projects, they provide opportunities for students to engage in projects and gain valuable experience that can prepare them for successful careers in technology.

The academic staff's research has gained international visibility on platforms like Google Scholar (GS). All teachers have a commendable GS h-index, and most have published papers with high citation scores. The teachers have been actively participating in international conferences.

The research work of the academic staff of FECE is confirmed through different mechanisms: Scientific publications in journals and conferences based on the criteria defined in the Regulation of UP for selection procedures about appointment, re-appointment, and advancement of academic staff. Participation in research and professional development

projects with partners from the industry with whom FECE has signed cooperation agreements. Still, the university needs to regulate or support technological transfer.

According to the list of publications submitted, the teachers have published at least an average of one scientific/applied research publication per year for the past three years.

The academic staff within the Faculty publishes papers under the name of the University of Prishtina. No evidence was provided that academic staff are encouraged to include information about their research and scholarly activities relevant to their courses and other significant research developments in their teaching.

The university has not yet established intellectual property ownership policies or regulations; however, this is in process.

The Faculty of Electrical and Computer Engineering is currently involved in three research projects, including the security of e-voting with blockchain technologies, cooperative projects that solve real problems using IoT technology, and automated examination timetabling in the Faculty of Electrical and Computer Engineering - University of Prishtina. Students and academic staff are also involved in capacity-building projects sponsored by the Erasmus+ schema of the European Commission.

Compliance level: Substantially compliant

ET recommendations:
1. *Develop and implement a regulation on technology transfer.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that FECE will convey the recommendations to the central level for the acceleration of the work on the drafting of a regulation for the transfer of technology.

2. *It is recommended that the academic staff include scholarly activities relevant to their courses in their teaching. A reference to their work might be included in the syllabi for their courses.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that FECE will arrange for academic staff to include in teaching and promote scientific activities related to their subjects and the inclusion of references to their work in the syllabi for their courses.

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3. *It is recommended that the university establish an intellectual property ownership policy.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that FECE will convey the recommendations to the central level for the acceleration of the work related to the intellectual property policy.

2.7 Infrastructure and Resources

According to SER table 19, page 122, and the facilities tour during the visit, the faculty has enough premises, human resources, and equipment to satisfy the needs of the study program. However, SER page 155 mentions a "Lack of technical staff for maintenance of laboratories."

The financial plan of UP includes expenditure figures for the past years and estimated expenditures for the upcoming years. The estimated expenses for all UP academic units for 2023 and 2024 are 32.5 and 34.8 million euros, of which 5.4 and 6.4 are capital investments, respectively. FECE will have approximately 2.3 and 2.4 million euros for years 2023 and 2024, respectively, while for capital investments, it will have at disposal approximately 0.38 and 0.45 million euros for years 2023 and 2024, respectively. FECE will use these financial means to advance its infrastructure, laboratories, and IT infrastructure for all its study programs.

The Faculty of Electrical and Computer Engineering at the University of Prishtina owns a complex of technical faculties, including laboratories, canteens, and university apartments. The Kosovo Cadastral Agency has issued the legal documents for the property. The faculty uses open-source software and free licences for most of its courses but also receives two software licences from the Government of Kosovo for Microsoft Operating System and Microsoft Office 365. Additionally, the faculty has purchased the software licence for the Burp Suite software within the framework of an Erasmus+ project for lab experiments related to computer security. The FECE library has 186 study carrels, while the hall of the faculty has 23 group study carrels and 16 separate sitting zones for large group work or discussion.

Currently, the number and size of teaching classrooms and laboratories are adequate. Laboratories equipped with IT equipment are used for the applicative activities of the specialty disciplines included in the curricula. The applicative activities are conducted in these laboratories.

The University of Prishtina has a well-equipped university library with a large amount of literature in all fields, including a departmental library. The library has 186 seats in the reading rooms and 170 in the group work area. The library has 197 unique titles, 28 of which were

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acquired in 2022. The university also has subscriptions to Elsevier Journal Library and Perlego Digital Online Library. However, the SER page 156 mentions a "lack of faculty funds for the purchase of textbooks and equipment for the courses being taught."

The infrastructure is adapted to students with special needs.

Compliance level: Substantially compliant

ET recommendations:
1. *It is recommended to recruit or have a plan with a near deadline to increase the number of technicians to maintain the labs.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that With the implementation of the study program, we will have additional staff for the laboratories.

2. *The FECE has a budget but not on the study program level. For sustainability purposes, it is recommended that FECE develop a budget plan for the study program.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that FECE will work on developing a budget plan for the study program.

3. *The weakness in standard 7.5 has still not been entirely resolved since the previous accreditation.*

CSE Staff—Response to this recommendation: The institution has agreed to this recommendation, and they mentioned in their response that FECE will take measures so that the weakness in standard 7.5 is fully resolved as soon as possible, in coordination with the central level.

3. FINAL RECOMMENDATION OF THE ET
The general impression of the study program is positive; however, there is room for improvement to fully meet the standards and move the study program to a higher level. The study program needs to be aligned with the international required competencies in the two fields of Computer Engineering and Software Engineering and to do so ACM develops a guide for that, i.e. CC2005 and CC2016.
(https://www.acm.org/education/curricula-recommendations)

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Some important areas like technology transfer and intellectual property are not regulated yet, some policies need to be developed.

To attract international and Erasmus+ students, an English version of the university/study program must be developed.

It is recommended that the university's management initiate talks with other faculty regarding ICT to explore opportunities for collaboration and resource sharing in the field of ICT. This should be done regardless of whether the university has a dedicated ICT faculty.

Standard	Compliance level
1. Mission, objectives and administration	Fully compliant
2. Quality management	Substantially compliant
3. Academic staff	Substantially compliant
4. Educational process content	Substantially compliant
5. Students	Fully compliant
6. Research	Substantially compliant
7. Infrastructure and resources	Substantially compliant
Overall compliance	**Substantially compliant**

In conclusion, the Expert Team considers that the study program Bachelor of Computer and Software Engineering offered by the University of Prishtina is Substantially compliant with the standards included in the KAA Accreditation manual and, therefore, recommends reaccreditation of the study program for a duration of **3 years** with a number of **50 students** to be enrolled in the program.

Expert Team

Member

Seifedine Kadry

	Seifedine Kadry	**22.04.2024**
(Signature)	(Print Name)	(Date)

Member

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(Signature)	(Print Name)	(Date)

Member

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Member

Asnate Upmace		**1st May 2024**
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Flavio Canavero		**1st May 2024**
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Stefania Armaselu		**3rd May 2024**
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