University of Prishtina "Hasan Prishtina"
BSc in Computer and Software Engineering

ACCREDITATION

REPORT OF THE EXPERT TEAM

March 2021, Tallnn/Prishtna

TABLE OF CONTENTS

Contents

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

2

1. INTRODUCTION

1.1. Context

Date of site visit: 18.03.2021

Expert Team (ET) members:

- Prof. Dr. Peeter Normak – Tallinn University, EE

Coordinators from Kosovo Accreditation Agency (KAA):

- Naim Gashi, Executive Director of KAA
- Shkelzen Gerxhaliu, Senior Officer for Evaluation and Monitoring
- Arianit Krasniqi, Senior Officer for Evaluation and Accreditation
- Leona Kovaci, Senior Officer for Evaluation and Monitoring
- Ilirjane Ademaj, Senior Officer for Evaluation and Monitoring

Sources of information for the Report:

- *Faculty of Electrical and Computer Engineering, Self-Evaluation Report (SER-Faculty)*
- *Self-Evaluation Report (SER)*
- *Annex02-Evolution and Last Time Development Registered from Previous Evaluation*
- *Annex03-Budget Planning and Financing*
- *CVs of the academic staff*
- *Syllabi of the subjects*
- *The Manual for External Evaluation of Higher Education Institutions*
- *Accreditation Manual*

Requested documents:

1. *Statute of UP*
2. *The Strategic Plan of the University 2020-2022*

3

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

3

3. *Regulation of Bachelor Studies*
4. *Regulation of Master Studies*
5. *Regulation for Disciplinary Procedures*
6. *Regulation on Quality Assurance*
7. *Regulation on Academic Mobility*
8. *Regulation on Selection Procedures for Appointment, Reappointment, and Promotion of Academic Staff*
9. *The latest evaluation report of the study program*
10. *Provide the latest survey data collected from students, graduates and employers*
11. *Minutes of the last two meetings of the Quality Assurance and Evaluation Commission*
12. *Regulation of internship*
13. *Regulation for the research activities*
14. *Statute of FECE*
15. *Strategic/Development Plan of FECE (draft)*
16. *Research Development Strategy/Plan*
17. *Minutes on two last meetings of FECE Industry Advisory Body*
18. *Regulation on the Advisory Board of FECE*
19. *Code of Ethics*
20. *Regulation for the scientific research activity*
21. *Templates of the questionnaires for different stakeholder groups - graduates, students (both for assessing the administration as well as the academic staff and courses), employers, self-assessment of academic staff.*

Received documents:

1. *Statute of the University of Prishtina "Hasan Prishtina"*
2. *The Strategic Plan of the University of Prishtina 2020-2022*
3. *Regulation for Undergraduate Studies – Bachelor*
4. *Amendment to the Regulation of Bachelor Studies*
5. *Regulation for Master Scientific Studies*
6. *Amendment to the Regulation of Master Studies*
7. *Regulation on Disciplinary Measures and Procedures for the Academic Staff of University of Prishtina*

4

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

4

8. *Regulation on Quality Assurance and Evaluation at the University of Prishtina*

9. *Regulation on the Student Academic Mobility in the University of Prishtina "Hasan Prishtina"*

10. *Regulation on the Selection Procedures Related to the Appointment, Reappointment and Promotion of the Academic Staff at the University of Prishtina "Hasan Prishtina"*

11. *Evaluation report of FECE 2014*

12. *Statistical Report - Survey Data - Evaluation of quality in teaching*

13. *Statistical Report - Survey Data - Career needs and employment plans assessment*

14. *Statistical Report - Survey Data - Skills and employability of UP students*

15. *CSE Minutes of the 25.02.2021 meeting of Central Commission for Quality Assurance*

16. *CSE Report of CCQA 18.09.2020 meeting*

17. *Template for the contract for the completion of internship*

18. *Regulation about the Office for Research and Sponsored Programs*

19. *Regulation on Financing of Research – Scientific, Artistic and Sports Activities at the University of Prishtina*

20. *Explanation note Regarding the request for FECE statute*

21. *Strategic Plan of Actions 2021-2023 of FECE*

22. *Extract from the Strategic Plan - research*

23. *Lists of participants of four (07.02.2020, 08.03.2021, 12.03.2021, 15.03.2021) meetings discussing the issues of study programs*

24. *Regulation on Establishment and Functioning Principles of the Advisory Board of Academic Units at the University of Prishtina "Hasan Prishtina"*

25. *Code of Ethics for the Academic Staff of the University of Prishtina "Hasan Prishtina"*

26. *Questionnaire for Graduates*

27. *Questionnaire for Labor Organization*

28. *Questionnaire for Administrative and Support Staff*

29. *Questionnaire for Academic Staff*

30. *Questionnaire for Bachelor Level Students*

Criteria used for program evaluation:

- *Standards and performance indicators for external quality assurance (Re/accreditation of bachelor and masters study programs) set in the Accreditation Manual.*

5

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

5

1.2. Site visit schedule

09.00 – 09.40   Meeting with the management of the faculty where the programme is integrated – Joint session
Dean: Prof.Asoc.Dr.Isak Shabani,
Vice deans: Prof.Asoc.Dr.Qamil Kabashi,
                 Prof.Asoc.Dr.Milaim Zabeli
                 Prof.Asoc.Dr.Kadri Sylejmani

09.45 – 10:30   Meeting with quality assurance representatives and administrative staff - Joint session
Coordinator for Academic Development at FECE: Prof.Ass.Dr.Hëna Maloku,
Head of office for academic development at UP: Besnik Loxha
Student service officer at FECE: Vlora Shileku

10:30 – 11:15   Lunch break

11:15 – 12.25   Meeting with the heads of the study programme – Computer and Software Engineering, BSc and Computer and Software Engineering, MSc
BSc Study Program:
Prof.Ass.Dr.Avni Rexhepi,
Ass.Dr.Valon Raça,
Prof.Asoc.Dr.Qefsere Gjonbalaj.

MSc Study Program:
Prof.Asoc.Dr.Kadri Sylejmani,
Prof.Asoc.Dr.Isak Shabani.

12.30 – 13:10   Meeting with teaching staff – Computer and Software Engineering, BSc and Computer and Software Engineering, MSc
Prof.Dr.Lule Ahmedi,
Prof.Dr.Blerim Rexha,
Prof.ass.Dr.Lavdim Kurtaj,
Ass.Dr.Artan Mazrekaj.

6

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

6

13.15 – 14:00	Meeting with employers of graduates – **Computer and Software Engineering, BSc and Computer and Software Engineering, MSc**

Jeta Zagragja, Director Of Business Operations, UCXmarket (ucxmarket.com)
Ermal Sadiku, CEO, LinkPlus
Admir Kadriu, CTO, DUA (Dua.com)
Gentrit Gojani, CTO, Kodelabs (Kodelabs.com)
Albert Aliu, Managing Director, Global CT Digital Kosovo – degë e Global CT Group GmbH (Globalct.com)
Mendim Avdyli, CEO – Dega në Kosovë, Comitas (Comitas.ch)

14.05 – 14.15   Internal meeting of KAA staff and experts – Joint session

15:15 – 15:25   Closing meeting with the management of the faculty and program – Joint session

Dean:	Prof.Asoc.Dr.Isak Shabani,
Vice deans:	Prof.Asoc.Dr.Qamil Kabashi,
	Prof.Asoc.Dr.Milaim Zabeli
	Prof.Asoc.Dr.Kadri Sylejmani

1.3. A brief overview of the institution and program under evaluation

Faculty of Electrical and Computer Engineering (hereinafter the Faculty or FECE) was established in 1961 (under a different name), on the foundation of the Technical High School, which offered study programs in civil, clectro-technical and mechanical engineering. After some restructuring and name changes, the Faculty has got its present name in 2001.

The Faculty has six departments: 1) Telecommunications, 2) Computer Engineering, 3) Computerized Automation with Robotics, 4) Power Engineering, 5) Electronics, 6) General Subjects.

The studies at the Faculty are concentrated in three main areas: 1) electricity generation and utilization, 2) information processing and transmission, and 3) computer engineering. The third group covers the analysis and design of computer systems, computer networks, software engineering, software systems security, operating systems, distributed and parallel systems, Web and data.

The Faculty has defined its mission in "educating the youth in the fields of Electric and Computer Engineering, at all levels of higher education, with the aim of preparing them for

7

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

7

the demands of the labour market in the country and beyond, and for the continuous education in this highly dynamic field, and also to contribute directly to the sustainable technological, social and scientific development of Kosovo" (SER-Faculty, page 5).

The Vision is to become a "national and international model of a contemporary and innovative faculty with integrated teaching, whereby practice complements theory and professional skills and research skills are developed for the benefit of society" (SER-Faculty, page 5).

Strategic objectives and strategy for achieving the mission and vision have been developed.

There are around 2200 students currently enrolled in FECE's Bachelor programs and another 210 in its Master programs. FECE counts among its personnel 33 full time academic staff, 24 part-time academic staff and 5 retired professors while there are 13 administrative employees.

***

It is pertinent to note here that the self-assessment report submitted by the university lacked concrete information, so more information than usual had to be obtained from other sources. An additional problem arose because the ET was unable to find the university's regulations and other documents on the public web. This was also the reason why the conversations with the representatives of the university were under some time pressure.

2. PROGRAM EVALUATION

2.1. Mission, objectives and administration

1.1. The mission of the bachelor's program in Computer and Software Engineering is to prepare students for professional careers and to enable them to do research in computer science and engineering (SER, page 4). On the other hand, as the mission of FECE (see section 1.3) explicitly defines *electric and computer engineering* as the scope of the Faculty's academic activities, the study program's mission is in compliance with the overall mission statement of the institution.

1.2.   It is argued (SER, page 77) that the study program is in line with the National Qualifications Framework. However, no comparison or explanation is provided. Consistence with the Framework for Qualifications of the European Higher Education is

8

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

8

even not mentioned in the SER. Nevertheless, the set of learning outcomes of the study program covers to a large extent the competences that are stated in the National Qualifications Framework and the Framework for Qualifications of the European Higher Education.

1.3.   The study program has 18 learning outcomes, four of which deal with research competences. During the meeting with staff members, they also mentioned activities that support the educational motivation of students in their studies - the interactivity of classes, awakening interest in the independent study of additional educational material, etc. Therefore, it can be said that the study program has an overarching didactic and research concept.

1.4.   SER-Faculty lists (page 10) 12 regulations dealing with recurring procedural or academic issues: the *Statute of UP*, *Regulation of Bachelor studies*, *Regulation for disciplinary procedures*, *Regulation on quality assurance*, *Regulation on academic mobility* etc. However, the ET was not able to find these in the university web site.

1.5.   The university has adopted principles of ethical conduct for academic staff only, according to the *Code of Ethics for the Academic Staff of the University of Prishtina "Hasan Prishtina"*. There is an elective course "Legal, Ethical and Social Issues in ICT" in the study program. However, there are no internal regulations for the ethical conduct of students and administrative staff; some aspects of this are scattered across different documents.

1.6.   Approximately half of the documents submitted to the experts date from 2019 or 2020. Some of the remaining documents (such as the university statutes) were those that do not need to be amended frequently. Some documents (for example the templates of questionnaires) did not contain the date of their approval. The competence to amend most of these documents lies with the central bodies of the university, not the Faculty.

Standard	Compliance	
	Yes	No
Standard 1.1. The study program mission is in compliance with the overall mission statement of the institution.	**X**	
Standard 1.2. Relevant academic and professional advice is considered when defining the intended learning outcomes which are consistent with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.	**X**	

9

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

9

Standard 1.3. The study program has a well-defined overarching didactic and research concept.	X	
Standard 1.4. There are formal policies, guidelines and regulations dealing with recurring procedural or academic issues. These are made publicly available to all staff and students.		X
Standard 1.5. All staff and students comply with the internal regulations relating to ethical conduct in research, teaching, assessment in all academic and administrative activities.		X
Standard 1.6. All policies, regulations, terms of reference and statements of responsibility relating to the management and delivery of the program are reviewed at least once every two years and amended as required in the light of changing circumstances.	X	

Compliance level: substantially compliant

ET recommendations:

1. *Make formal policies, guidelines and regulations dealing with recurring procedural or academic issues available through the university's public web pages.*

2. *Develop code of ethical conduct for students and administrative staff, and publish in a separate document or update the existing document for academic staff.*

2.2. Quality management

2.1. The main quality instruments are feedback questionnaires for academic staff, for administrative and support staff and for students. Students evaluate at the end of each semester each subject/course electronically through the SEMS system. Since filling in the questionnaires is voluntary, the available data are not representative and therefore no correct conclusions can be drawn from them.

2.2. *Regulation on Quality Assurance and Evaluation at the University of Prishtina* is the main document that states the actors, their duties and the quality assurance processes. Each faculty has the Quality Assurance and Evaluation Committee and the Quality Coordinator who "instructs academic staff and students on the practical aspects of implementing ECTS, guides and monitors the relevant department and study commission during the accreditation/re-accreditation process to design/review study programs, advises, plans and monitors the evaluation process of courses and teaching, as well as internal quality assessment, in co-operation with the academic

10

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

10

unit management, takes care of and monitors the involvement of all stakeholders (academic staff, students, businesses or Advisory Board members) for the design/review of study programs, organizes information sessions for academic staff and students related to the Bologna process, in collaboration with the Management, collects data and information on scientific activity in the academic unit (identifying scientific papers, professional and scientific projects), advises Management and academic unit students regarding the realization of student mobility, advises, plans and monitors quality assurance schemes, activities and activities in the academic unit, collects and reports on the data of each activity as requested by the Pro-Rector for Academic Development, to demonstrate the degree of progression from the current state to the desirable state" (SER, page 9).

2.3. Quality assurance issues belong to the responsibilities of the Vice-Rector for quality assurance (ex-officio). Quality assurance on the Faculty level belongs to the responsibility of the Quality Coordinator who coordinates the activities of program planning and delivery (see section 2.2). The main tools used are: 1) Questionnaire for Academic Staff, 2) Questionnaire for University Administrative and Support Staff, 3) Bachelor Level Students' Questionnaire. Students evaluate the quality of teaching at the end of each semester. Additionally, student passing rate is used as an indicator to assess the quality of both the study programme and the teacher.

2.4. Quality assurance focuses on the quality of the subjects. The questionnaires referred to in section 2.3 do not address the quality of the study program as a whole. Nor were other instruments presented to ET that would address issues of the quality of the study program as a whole, such as learning outcomes and their coverage, the relationship between theoretical and practical learning, links between subjects, etc.

2.5. As the standards 2.4 and 2.6 are clearly not met (as well as some standards in other sections), the quality assurance process does not ensure compliance of the study program with all standards.

2.6. No regular feedback from graduates and employers on the study program is collected. There are developed questionnaires for graduates and labour organizations, but these cover the general issues of studies and the competences of graduates, respectively. As was explained to the ET, there is mostly sporadic communication on the study program with the graduates and employers. At the meeting with employers, they made several proposals for improvement of the study program, which also confirms the understanding that the views of employers have not been sufficiently taken into account in the development of the study program. Moreover, the ET was not able to find results of evaluations on the public web of the university.

11

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

11

2.7. The document *Regulation on Quality Assurance and Evaluation at the University of Prishtina* states that the data obtained during the internal evaluation are to be used for the further development of study programs. In addition, other source data are used, including data on the employment of graduates.

2.8. Again, the document *Regulation on Quality Assurance and Evaluation at the University of Prishtina* sets out the requirement for periodicity of curriculum quality analysis. Enforcing this requirement is a task of the Office for Academic Development at university level and Quality Assurance and Evaluation Committee at the Faculty level.

2.9. The fact that big part of the latest versions of the documents came into force in the last two years shows that quality assurance arrangements for the study program are regularly evaluated and improved.

Standard	Compliance	
	Yes	No
Standard 2.1. All staff participate in self-evaluations and cooperate with reporting and improvement processes in their sphere of activity.	X	
Standard 2.2. Evaluation processes and planning for improvement are integrated into normal planning processes.	X	
Standard 2.3. Quality assurance processes deal with all aspects of program planning and delivery, including services and resources provided by other parts of the institution.	X	
Standard 2.4. Quality evaluations provide an overview of quality issues for the overall program as well as of different components within it; the evaluations consider inputs, processes and outputs, with particular attention given to learning outcomes for students.		X
Standard 2.5. Quality assurance processes ensure both that required standards are met and that there is continuing improvement in performance.		X
Standard 2.6. Survey data is being collected from students, graduates and employers; the results of these evaluations are made publicly available.		X
Standard 2.7. Results of the internal quality assurance system are taken into account for further development of the study program. This includes evaluation results, investigation of the student workload, academic success and employment of graduates.	X	
Standard 2.8. The institution ensures that reports on the overall quality of the program are prepared periodically (eg. every three years) for consideration within the institution indicating its strengths and weaknesses.	X	
Standard 2.9. The quality assurance arrangements for the program are themselves regularly evaluated and improved.	X	

12

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

12

Compliance level: substantially compliant

ET recommendations:

1. *Develop and implement measures for a comprehensive quality analysis of the study program.*

2. *Develop and implement a system for receiving systematic feedback on the study program from alumni and employers.*

2.3. Academic staff

3.1. University of Prishtina as a public university follows strictly all regulations concerning employment. The selection and promotion of teaching staff is conducted according to the articles no. 171, 175, 176 and 177 of the *Statute of UP* as well as according to the following regulations: *Regulation on Selection Procedures for Appointment, Reappointment and Promotion of Academic Staff* and *Regulation on Selection Procedures for Part-time Staff*. The publication of position openings by UP is usually done twice a year. Requests for new academic positions are submitted by the respective departments to the Faculty council that makes the decision on opening the position. Personal data of academic persons are presented in the SER in tabular form. The courses taught are listed in another table.

3.2. Legal requirements set for teaching staff are met: according to the SER, all 19 teachers have a PhD degree and are elected by open competition.

3.3. The formal requirements concerning employment of academic staff by other institutions are met – all full-time teachers are indicated in their publications University of Prishtina as their only employer.

3.4. About 95% of all teachers (18 out of 19) have full-time employment, and consequently, they cover the big majority of courses.

3.5. There are 18 full-time teachers on the study program who hold a PhD degree. Although about half of teachers are listed among the teachers of the master program as well, the total amount of staff with a PhD is sufficient for both study programs.

3.6. The university has established the Center for Teaching and Excellence that organises training of teaching staff. Experienced professors are used as trainers of younger colleagues. More recently training on enhancing teaching and assessment methods, creating syllabuses and writing learning outcomes were organized by international

13

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

13

experts; some teachers took part on an international project DRIVE. There are six regular meetings during each year where experienced teaching staff present their experience in teaching and share relevant documents and materials. Newly employed teaching staff are obligated to take two courses on improvement of teaching methods. Every teacher has to attend at least two trainings/workshops between each promotion or before signing a new contract. However, the university does not have a teacher training strategy and corresponding plan, as well as a database of training completed by teachers.

3.7. The teaching staff is also engaged in community services like participating in the boards of national agencies, government institutions and the Ministry of education, etc. The staff named several additional activities during the meeting with the ET, that are conducted often with students' involvement.

3.8. Evaluation of the teaching staff is administered by the Rectorate and is done at the end of each semester through the questionnaires posted on the SEMS (Electronic student management system) platform. The results of the academic staff evaluation are taken into account for promotion of the academic staff and renewal of contracts. The performance of each professor is measured based on the University regulation for staff promotions. However, the number of students that fill in the questionnaires is very low; there are no questionnaires developed for peer and superiors' evaluations.

3.9. Neither the *Regulation on Quality Assurance and Evaluation at the University of Prishtina* nor the *Strategic Plan of Actions 2021-2023 of FECE* contains strategies or measures for quality improvement specifically on improving the teaching strategies and quality of learning materials.

3.10. There are no retired full-time teachers – the average age of full-time teaching staff is about 50 years.

Standard	Compliance	
	Yes	No
Standard 3.1. Candidates for employment are provided with full position descriptions and conditions of employment. To be presented in tabular form data about full time (FT) and part time (PT) academic/ artistic staff, such as: name, qualification, academic title, duration of official (valid) contract, workload for teaching, exams, consulting, administrative activities, research, etc. for the study program under evaluation.	X	

Standard 3.2. The teaching staff must comply with the legal requirements concerning the occupation of teaching positions included in the Administrative instruction on Accreditation.	X	
Standard 3.3. Academic staff do not cover, within an academic year, more than two teaching positions (one full-time, one part-time), regardless of the educational institution where they carry out their activity.	X	
Standard 3.4. At least 50% of the academic staff in the study program are full time employees, and account for at least 50% of the classes of the study program.	X	
Standard 3.5. For each student group (defined by the statute of the institution) and for every 60 ECTS credits in the study program, the institution has employed at least one full time staff with PhD title or equivalent title in the case of artistic/applied science institutions.	X	
Standard 3.6. Opportunities are provided for additional professional development of teaching staff, with special assistance given to any who are facing difficulties.	X	
Standard 3.7. The responsibilities of all teaching staff, especially full-time, include the engagement in the academic community, availability for consultations with students and community service.	X	
Standard 3.8. Academic staff evaluation is conducted regularly at least through self-evaluation, students, peer and superiors' evaluations, and occur on a formal basis at least once each year. The results of the evaluation are made publicly available.		X
Standard 3.9. Strategies for quality enhancement include improving the teaching strategies and quality of learning materials.		X
Standard 3.10. Teachers retired at age limit or for other reasons lose the status of full-time teachers and are considered part-time teachers.	X	

Compliance level: substantially compliant

ET recommendations:

1. *Develop and implement regular measures for assessment and support of academic staff, including annual personal development interviews with the superior.*

2. *Include improvement of the teaching and assessment methods into the strategies for quality enhancement and the strategic plans, as well as the continuous improvement in the content and quality of learning materials.*

15

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

15

2.4. Educational process content

4.1. The study program focuses on two relatively broad and well-balanced areas – computer engineering and software engineering. Such a broad scope is not common in ICT curricula, but can be considered justified in this case because the study program: 1) covers a relatively under-covered niche in the field of ICT undergraduate study programs in Kosovo, 2) offers a wide range of specializations in master's studies, 3) fits well with the academic directions of the faculty. Although the learning outcomes of the study program are focused on ICT competences, some generic and soft skills are covered as well. However, there are few aspects that deserve focused attention and redesign:

4.1.1. The fact that the learning outcomes stress the development and application of **research skills** in solving real problems is commendable. However, the content of the study program and its subjects do not ensure sufficient competencies in this area – there is no subject in research methods/methodologies and research methods are not adequately addressed in any of the existing subjects.

4.1.2. **Teamwork skills** are crucial for successful professional activities in ICT. The development of competencies in this area is not sufficiently stated in the learning outcomes of the study program. There is only one (elective!) subject – IT Project Management – where ability to work in a team is mentioned.

4.1.3. The study program has a conventional structure, consisting of a collection of individual relatively weakly related subjects. For those who complete this type of study program to have the skills to **plan and implement a full development cycle** - from requirements definition and analysis to testing a working prototype - the study program must include a mandatory project design and implementation practice. NB! The IT project Management elective subject in the study program does not provide sufficiently such skills, as it is aimed at developing knowledge rather than skills.

4.2. An analysis showing the compliance of the study program with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area was not provided. However, the set of learning outcomes of the study program indicates that the study program is compliant to these frameworks.

4.3. The study program has 18 learning outcomes. The problem is that the first academic year is identical in all bachelor's study programs of the Faculty. This makes it difficult to define electives, especially in the first semester. At the beginning of the studies, one of the important tasks of the electives is to reduce the problems arising from the

16

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

16

difference in the prior knowledge and skills of the students who have started their studies. The wide range of study programs - from power systems to ICT - means that the competencies that need to be leveled can vary a lot.

4.4. The syllabi contain all the necessary components and were submitted in electronic form. They are in general detailed enough to get an adequate understanding on the content and other aspects of the subjects. In some places, some aspects are described differently in different documents. For example, the study program in SER has the subject *Professional Practice*, but the syllabus of the same subject in the SER has the title *Internship*. Moreover, a separately provided syllabus has the title *Professional Internship*. In the first two cases, this subject is declared compulsory, and in the third – optional!

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

4.6. This is a new study program where no students have been admitted yet. However, deciding on the already established practice, the student-teacher relationship seems to be a partnership.

4.7. The teaching methodology and assessment methods are described in detail in the syllabi. The teachers mentioned that they have based on the principles stated in the ACM curricula recommendations. Concrete practices were mentioned to motivate students to focus on their studies. For example, the total score for a subject can be increased depending on different additional criteria (up to 10% for interactivity, up to 5% for extra work etc).

4.8. Learning outcomes and other aspects of subjects are described in the syllabi and are planned to be discussed already on the first class.

4.9. The grading system that is used in all Balkan countries is used. The grades are 5, 6, 7, 8, 9, 10 where 5 marks failing and 6-10 are positive. The passing level is 50% as widely used in Europe.

4.10. Students who are not satisfied with the evaluation of their work have the right to submit a written complaint to the Dean. The procedures are described in the *Statute of the University*.

4.11. The learning outcomes and other aspects in the syllabus for *Professional Practice* (*Internship*) are described in very general terms and in fact does not specify the learning outcomes. The responsibilities of the university tutor are not described at all in the syllabus.

4.12. The faculty has established close partnerships with a number of local companies that have recruited a large number of university graduates and interns. The meeting with

17

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

17

the representatives of the companies revealed that they were well acquainted with the study program, and therefore they were able to discuss the substantive problems on the topics of the study program and internship.

Standard	Compliance	
	Yes	No
Standard 4.1. The study program is modelled on qualification objectives. These include subject-related and interdisciplinary aspects as well as the acquisition of disciplinary, methodological and generic skills and competencies. The aspects refer especially to academic or artistic competencies, to the capability of taking up adequate employment, contributing to the civil society and of developing the students' personality.		X
Standard 4.2. The study program complies with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. The individual components of the program are combined in a way to best achieve the specified qualification objectives and provide for adequate forms of teaching and learning.	X	
Standard 4.3. The disciplines within the curriculum are provided in a logical flow and meet the definition and precise determination of the general and specific competencies, as well as the compatibility with the study programs and curricula delivered in the EHEA. To be listed at least 7 learning outcomes for the study program under evaluation.	X	
Standard 4.4. The disciplines within the curriculum have analytical syllabuses which comprise at least the following: the discipline's objectives, the basic thematic content, learning outcomes, the distribution of classes, seminars and applicative activities, students' assessment system, the minimal bibliography, etc. The full course description/ syllabuses of each subject/ module should be attached only in electronic form to the self-assessment report for the study program under evaluation.	X	
Standard 4.5. If the language of instruction is other than Albanian, actions are taken to ensure that language skills of both students and academic staff are adequate for instruction in that language when students begin their studies. This may be done through language training prior to the commencement of the program.	n.a.	
Standard 4.6. The student-teacher relationship is a partnership in which each assumes the responsibility of reaching the learning outcomes. Learning outcomes are explained and discussed with students from the perspective of their relevance to the students' development.	X	

Standard 4.7. Teaching strategies are fit for the different types of learning outcomes programs are intended to develop. Strategies of teaching and assessment set out in program and course specifications are followed with flexibility to meet the needs of different groups of students.	**X**	
Standard 4.8. Student assessment mechanisms are conducted fairly and objectively, are appropriate for the different forms of learning sought and are clearly communicated to students at the beginning of courses.	**X**	
Standard 4.9. Appropriate, valid and reliable mechanisms are used for verifying standards of student achievement. The standard of work required for different grades is consistent over time, comparable in courses offered within a program, and in comparison with other study programs at highly regarded institutions.	**X**	
Standard 4.10. Policies and procedures include actions to be taken in to dealing with situations where standards of student achievement are inadequate or KAA inconsistently assessed.	**X**	
Standard 4.11. If the study program includes practice stages, the intended student learning outcomes are clearly specified and effective processes are followed to ensure that those learning outcomes and the strategies to develop that learning are understood by students. The practice stages are allocated ETCS credits and the work of the students at the practical training organisations is monitored through activity reports; students during practice stages have assigned tutors among the academic staff in the study program.		**X**
Standard 4.12. In order to facilitate the practice stages, the higher education institution signs cooperation agreements, contracts or other documents with institutions/organisations/practical training units. *To be inserted the overview of the program (with all areas to be filled out)*	**X**	

Compliance level: substantially compliant

ET recommendations:

1. *Revise the learning outcomes of the study program, placing more emphasis on soft skills - teamwork, creativity, entrepreneurship, etc.*

2. *Complement the study program in such a way that the learning outcomes (including those associated with the research activities) foreseen in the study program are achievable. At the same time, prescribe a mandatory development practice, within which a full cycle of solution development is performed.*

3. *Update the internship syllabus so that it clearly states the learning outcomes and outlines the roles and responsibilities of all parties - company, university, intern.*

19

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

19

2.5. Students

5.1. The admission criteria are stated in the *Statute of the University* as well as in the *Regulation for Undergraduate Studies – Bachelor*. The University Senate issues detailed regulations by which students are admitted.

5.2. To enrol on bachelor studies, a student must have a high school diploma, pass the Matura state exam and the entrance exam (in mathematics) organized by the Faculty. The University Senate determines the number of candidates to be accepted, considering the proposed number by the Faculty Council for each study program.

5.3. According to the planned classes for the study program, one group of students consists of maximum 75 students for lectures (group of up to 150 students is divided into two subgroups), up to 40 for exercises, up to 20 for laboratory work and up to 10 for field work (although the meaning of the latter is not explained in the SER).

5.4. The ET was not provided with any document specifying procedures and timelines for student feedback. This issue was also not discussed in the SER. Questions about feedback from teachers are not included in the student questionnaire, so the university does not have adequate knowledge of student satisfaction with the feedback they get from the teachers.

5.5. The university has established an Electronic Student Management System (SEMS). SEMS is an electronic platform to which students have individual access. This platform records individual student achievements and contains all materials and information needed to pass the courses. All course syllabi are also published on SEMS. The Faculty has a database where they keep records of all student grades and students can get a printout of their grades if they need it.

5.6. Assessment of students is done through exams, colloquiums, seminars, laboratory exercises and presentations of the practical projects. If assessment consists of two parts – a written part and an oral part – then the grade is calculated based on the results of both parts. The student has the right to apply for the revision of the grade, by submission of a written complaint to the Dean. In this case, the student takes the exam before the commission. All exams are held on the announced exam dates in January, June and September. The Senate of the University of Prishtina (on the proposal of the Study Committee and the Faculty Councils) may decide to announce additional terms for exams if it considers that this contributes to the progress of the study process. The faculty adapts to students who are participating in an international exchange program or doing internship abroad, allowing them to take exams earlier.

20

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

20

5.7. The Faculty collects and analyses the pass rates and grades of students of the courses. The results of these analyses are forwarded to the dean who takes further measures if necessary. Analysis of the degree of graduation is foreseen as one of the tasks in the *Strategic Plan of Actions* 2021-2023 of the Faculty.

5.8. The university has not implemented any plagiarism detection software, and checking originality of students' written texts is not regulated.

5.9. The rights (including appeal procedures) and obligations of students and issues of non-academic conduct are stated in the *Statute of the University* which is a publicly available document.

5.10. The students' transfer between higher education institutions, faculties and study programs is regulated in the *Statute of the University* and in the *Regulation for Undergraduate Studies - Bachelor*. All students' rights and obligations are made publicly available.

5.11. The academic staff has sufficient scheduled times in their working hours for consultation and advice to students – consultations are written in the course syllabi as one of the forms of teaching methodology.

Standard	Compliance	
	Yes	No
Standard 5.1. There is a clear and formally adopted admission procedure at institutional level that the study program respects when organising students' recruitment. Admission requirements are consistently and fairly applied for all students.	X	
Standard 5.2. All students enrolled in the study program possess a high school graduation diploma or other equivalent document of study, according to MEST requirements.	X	
Standard 5.3. The study groups are dimensioned so as to ensure an effective and interactive teaching and learning process.	X	
Standard 5.4. Feedback to students on their performance and results of assessments is given promptly and accompanied by mechanisms for assistance if needed.		X
Standard 5.5. The results obtained by the students throughout the study cycles are certified by the academic record.	X	
Standard 5.6. Flexible treatment of students in special situations is ensured with respect to deadlines and formal requirements in the program and to all examinations.	X	

21

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

21

Standard 5.7. Records of student completion rates are kept for all courses and for the program as a whole and included among quality indicators.	X	
Standard 5.8. Effective procedures are being used to ensure that work submitted by students is original.		X
Standard 5.9. Students' rights and obligations are made publicly available, promoted to all those concerned and enforced equitably; these will include the right to academic appeals.	X	
Standard 5.10. The students' transfer between higher education institutions, faculties and study programs is clearly regulated in formal internal documents.	X	
Standard 5.11. Academic staff is available at sufficient scheduled times for consultation and advice to students. Adequate tutorial assistance is provided to ensure understanding and ability to apply learning.	X	

Compliance level: substantially compliant.

ET recommendations:

1. *Introduce a plagiarism detection system in the university (or in the Faculty).*

2. *Stipulate in the university regulations the obligations of lecturers regarding giving feedback to students.*

2.6. Research

6.1. One of the objectives of the study program is for students to (SER, page 5) "get in-depth knowledge for construction and programming function, databases, computer architecture and networks, Web, Data Security, algorithms and data structures, distributed and operating systems, artificial intelligence, etc., which will be further enhanced conducting substantive research in selected areas". Four learning outcomes of the study program deal with research competences: the graduates are able to (SER, page 5) "1) Undertake a research approach towards the solutions to be offered through the use of IT, 2) Demonstrate an advanced level of scientific knowledge in the field of Computer and Software Engineering and their chosen area of specialization, 3) Demonstrate authenticity in applying the acquired knowledge and practical understanding of problem finding and solving and can act independently in planning and implementing research, 4) Reads critically and evaluates the results of qualitative and quantitative research in the chosen field." Therefore, research objectives are clearly defined. On the other hand, there is no research methods/methodology course

22

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

22

in the study program and research methods are not mentioned in the description of any subject. It remains open, how students can obtain the stated research competences as research is not mentioned in learning outcomes of any subject. There are also no articles concerning research in *Regulation for Undergraduate Studies - Bachelor*.

6.2. Expectations for teaching staff involvement in research and scholarly activities and performance in relation to these expectations are specified in the work contract, in the *Statute of the University* and in the *Regulation on the Selection Procedures Related to the Appointment, Reappointment and Promotion of the Academic Staff at the University of Prishtina "Hasan Prishtina"*.

6.3. Research activities are determined indirectly: the document *Regulation on Financing Research – Scientific, Artistic and sports Activities at the University of Prishtina* lists the activities that are financially supported. Research indicators are listed in the *Strategic Plan of Actions 2021-2023* of FECE.

6.4. The scope of research of the academic staff is described by the following keywords: data science, machine learning, social network analysis, semantic web, software engineering, cyber security, e-government, web services, algorithms, data structures, artificial intelligence, parallel computing, cloud computing, wireless communication, etc. Additionally, five teachers teach math courses. Therefore, the research harmonizes quite well with the topics the teachers teach.

6.5. The research of academic staff is internationally visible (for example, in *Google Scholar, GS*). All teachers have a positive GS h-index, and the publications of a majority of teachers have relatively high citation scores, and the participation on international conferences has been relatively active.

6.6. Research is basically validated by scientific publications. Technological transfer is not regulated and not supported by the university. This is not facilitated by the salary system either, as salaries are unified and do not depend on cooperation with companies. However, realization of professional expertise for the needs of the community is foreseen as one of the tasks in the *Strategic Plan of Actions of FECE for* 2021-2023.

6.7. 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.

6.8. The academic staff within the Faculty publishes papers under the name of the University of Prishtina.

23

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

23

6.9. No evidences ware provided that academic staff are encouraged to include in their teaching information about their research and scholarly activities that are relevant to courses they teach, together with other significant research developments in the field. On the other hand, as the research of the teachers harmonizes quite well with the topics they teach, the potential is high to use research results in teaching. It also gives teachers the opportunity to propose topics for graduate thesis according to their research interests.

6.10. The university has not yet established intellectual property ownership policies or regulations, although "The development of policy for the protection of the intellectual property of the University and of its commercial utilization" is stated in the *Statute of the University* as one of the responsibilities of the Senate.

6.11. The prerequisites for student research are insufficient - the curriculum does not deal with research methods and methodology as explained in section 6.1 (research methods and methodology are not mentioned in any module description).

Standard	Compliance	
	Yes	No
Standard 6.1. The study program has defined scientific/applied research objectives (on its own or as part of a research centre or interdisciplinary program), which are also reflected in the research development plan of the institution; sufficient financial, logistic and human resources are allocated for achieving the proposed research objectives.		X
Standard 6.2. Expectations for teaching staff involvement in research and scholarly activities are clearly specified, and performance in relation to these expectations is considered in staff evaluation and promotion criteria.	X	
Standard 6.3. Clear policies are established for defining what is recognized as research, consistent with international standards and established norms in the field of study of the program.	X	
Standard 6.4. The academic staff has a proven track record of research results on the same topics as their teaching activity.	X	
Standard 6.5. The academic and research staff publish their work in speciality magazines or publishing houses, scientific/applied/artistic products are presented at conferences, sessions, symposiums, seminars etc. and contracts, expertise, consultancy, conventions, etc. are provided to partners inside the country and/or abroad.	X	

24

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

24

Standard 6.6. Research is validated through: scientific and applied research publications, artistic products, technological transfer through consultancy centres, scientific parks and other structures for validation.		**X**
Standard 6.7. Each academic staff member and researcher has produced at least an average of one scientific/applied research publication or artistic outcome/product per year for the past three years.	**X**	
Standard 6.8. Academic and research staff publish under the name of the institution in Kosovo they are affiliated to as full-time staff.	**X**	
Standard 6.9/6.8. Academic staff are encouraged to include in their teaching information about their research and scholarly activities that are relevant to courses they teach, together with other significant research developments in the field.	**X**	
Standard 6.10. Policies are established for ownership of intellectual property and clear procedures set out for commercialization of ideas developed by staff and students.		**X**
Standard 6.11. Students are engaged in research projects and other activities.		**X**

Compliance level: substantially compliant

ET recommendations:

1. *Update the study program either by adding a subject in research methods and methodology, or adding topics of research methods and methodology to different existing subjects.*

2. *Develop and implement a regulation on technology transfer.*

3. *The university is recommended to establish an intellectual property ownership policy.*

2.7. Infrastructure and resources

7.1.   In total, the Department of Computer Engineering has 1154m^2 at its disposal: four lecture halls, three laboratories, library, and rooms for teachers and administration. Videos were provided about the facilities. It seems that the Faculty has enough premises, human resources and equipment for satisfying the needs of the study program. However, teachers complained during the meeting with ET about difficulties in purchasing new equipment due primarily to financial and lengthy procedural reasons.

25

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

25

7.2. Financial plan of the whole Faculty has been provided where expenses for salaries, as well as faculty level operational expenses, and expenses for computers, new devices, renovations, furniture and other categories are calculated. The study programs of the university do not have separate financial plans, the financial needs of the study program are covered by the central administration of the university.

7.3. As a public institution of higher education, University's financial sustainability is guaranteed by the Mid-Term Expenditure Framework for the next three years. The University is the owner of the space it uses. The university has a central library, as well as the department has its own library of 80 m^2.

7.4. Considering the number of students (about 2400 students in the whole Faculty), the number and size of teaching classrooms and laboratories is adequate. The problem may lie in the placement of students for laboratory work, as it is planned to divide the students into 8 lab exercise groups.

7.5. The role of the library seems to be underestimated: the SER of 100 pages devotes to the library exactly two sentences. Moreover, these two sentences give absolutely no hint of compliance with Standard 7.5. The link to "Access to electronic resources" on the university web page is also empty (like several other links on the web page). The SER (page 99) lists "Lack of funds for the purchase of textbooks for the courses being taught" as one of the weakness for infrastructure and resources.

7.6. The infrastructure is not fully adapted to students with special needs. However, the *Strategic Plan of Actions of FECE* foresees concrete activities for improvement.

Standard	Compliance	
	Yes	No
Standard 7.1. The adequate long-term implementation of the study program is ensured in quantitative terms as regards premises, human resources and equipment. At the same time, it is guaranteed that qualitative aspects are also taken into account.	X	
Standard 7.2. There is a financial plan at the level of the study program that would demonstrate the sustainability of the study program for the next minimum three years.	X	
Standard 7.3. The higher education institution must demonstrate with adequate documents (property deeds, lease contracts, inventories, invoices etc.) that, for the study program submitted for evaluation it possesses the following, for the next at least three years: a) owned or rented spaces adequate for the educational process;	X	

26

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

26

b) owned or rented laboratories, with the adequate equipment for all the compulsory disciplines within the curriculum, wherever the analytical syllabus includes such activities; c) adequate software for the disciplines of study included in the curriculum, with utilisation licence; d) library equipped with reading rooms, group work rooms and its own book stock according to the disciplines included in the curricula.		
Standard 7.4. The number of seats in the lecture rooms, seminar rooms and laboratories must be related to the study groups' size (series, groups, subgroups); the applicative activities for the speciality disciplines included in the curricula are carried out in laboratories equipped with IT equipment.	X	
Standard 7.5. The education institution's libraries must ensure, for each of the study programs: a) a number of seats in the reading rooms corresponding to at least 10% of the total number of students in the study program; b) a number of seats in the group work rooms corresponding to at least 10% of the total number of students in the study program; c) their own book stock from Albanian and foreign speciality literature, enough to cover the disciplines within the curricula, out of which at least 50% should represent book titles or speciality courses of recognised publishers, from the last 10 years; d) a book stock within its own library with a sufficient number of books so as to cover the needs of all students in the cycle and year of study the respective discipline is provided for; e) a sufficient number of subscriptions to Albanian and foreign publications and periodicals, according to the stated mission.		X
Standard 7.6. The infrastructure and facilities dedicated to the implementation of the program is adapted to students with special needs.		X

Compliance level: substantially compliant

ET recommendations:

1. *Ensure adherence to* the Strategic Plan of Actions of FECE *concerning infrastructure for students with special needs.*

2. *Plan and implement measures to ensure compliance with the requirements of Standard 7.5.*

27

AKA | Qendra e Studentëve, kati 2-të, 10000 Prishtinë, Kosovë
Tel. +381 38 213722 | Fax +381 38 213087 | www.akreditimi-ks.org

27

3. OVERALL EVALUATION AND RECOMMENDATION OF THE ET

The following recommendations need to be considered in relation to the program accreditation:

1. The general impression is that the main factors hindering development are a number of university-level problems. These are:

   a. **The use of academic resources at the university is inefficient**, particularly in the field of ICT. It is known that the development of a society is largely determined by the digital solutions used in all its sectors, the so-called digital transformation. It is the same with university education in all subject areas, which requires digital transformation to ensure quality. To achieve excellence in this, academic competence in ICT should be pooled rather than split between different faculties. Thus, instead of each faculty recruiting some ICT lecturers, they should be grouped in one unit (faculty), which also provides ICT training in all other faculties. Such a unit would have the potential to create strong research teams that would be much more competitive in getting international ICT grants.

   b. In today's information society, economic development, culture, politics and the well-being of members of society are largely based on information. The most important mediation medium for public information about the university is the university website. Public universities should lead by example. However, **the public website of the University of Prishtina is literally a disaster**. The fact that a new website is being created is not an excuse for poor / non-existent quality of the existing web site. The responsibility for the quality of the university website cannot lie with any faculty, but with the top management of the university.

   c. Several **important areas are not regulated** at the university. For example, 1) The university has not established intellectual property policies and 2) technology transfer (including establishing spin-offs and start-ups) is not regulated. Ensuring academic activities with the necessary resources should be a special focus of university top management; every opportunity should be taken to this end. For example, there are some well-equipped laboratories, but not enough technicians to fully exploit the potential of these laboratories.

2. Regardless of whether the university concentrates ICT competence in one faculty or not, the faculty management is recommended to start negotiations with the management of the Faculty of Mathematics and Natural Sciences and with the Faculty of Mechanical Engineering on **mutually beneficial cooperation and sharing of resources** in the field of ICT.

Overall compliance:

Standard	Compliance level
1. Mission, objectives and administration	Substantially compliant
2. Quality management	Substantially compliant
3. Academic staff	Substantially compliant
4. Educational process content	Substantially compliant
5. Students	Substantially 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 University of Prishtina is *Substantially compliant* with the standards included in the *KAA Accreditation manual* and, therefore, recommends *to accredit* the study program for a duration of *3 years* with a number of 150 students to be enrolled in the program.

Expert Team

Chair

(Signature)	**Peeter Normak**	**7.04.2021**
(Signature)	(Print Name)	(Date)