AAB COLLEGE

*Professional Bachelor in
"PROGRAMMING"*

ACCREDITATION

REPORT OF THE EXPERT TEAM

April 2021
AAB College, Faculty of Computer Science

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1. INTRODUCTION

1.1. Context

Date of site visit: 17th March 2021

Expert Team (ET) members:

- *Prof. Dr. Josip Balen*
- *Ms. Laura Palac (student expert)*

Coordinators from Kosovo Accreditation Agency (KAA):

- *Mr. Naim Gashi*
- *Mr. Shkelzen Gerxhaliu*

Sources of information for the Report:

- *Self evaluation report "Professional Bachelor in Programming" January 2021, Prishtinë*
- *Syllabuses*
- *CVs of academic staff*
- *Video presentation AAB College*
- *Examples of employed FCS students*
- *List of activities of the FCS*
- *List of cooperation agreements of the FCS*
- *Voluntary work of FCS students*
- *AAB Strategic Development Plan 2018 - 2022*
- *Annual work plan of the Faculty of Computer Science: 2020 -2021*
- *Staff development plan*
- *Templates of the questionnaires/surveys for different stakeholder groups - students, graduates, academic staff, employers*
- *The latest survey data collected from students, graduates, and employers*
- *List of the partnership agreements and sample of the agreement*
- *AAB College's Code of Ethics for Scientific Research*

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- *Regulation for the promotion of the academic staff*
- *Forms for assessing the student placed at professional work*
- *Regulation For the development of practical work outside the college*

Criteria used for program evaluation:

- *Standards & performance indicators for external evaluation according to the Accreditation Manual of KAA, July 2018*

1.2. Site visit schedule

Expert Team

- Prof. Dr. Josip Balen – Faculty of Electrical Engineering, Computer Science and Information Technology, Osijek, Croatia
- Ms. Laura Palac

Coordinators of 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

Site Visit Program

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Meeting with the management of the Faculty

Time	Venue	Participants in the meeting
09.00 – 09.40	Vice Rector's Office 3rd Floor	Jusuf Qarkaxhija, Dean of the Faculty of Computer Science Valdete Daku, Vice Dean of the Faculty of Computer Science

Meeting with the responsible persons of the study programs

Time	Venue	Participants in the meeting
09.00 – 11.00	Vice Rector's Office 3rd Floor	Valdete Daku Edlira Qefalija Shkeqlim Miftari Tringa Krasniqi

Meeting with representatives of quality assurance and administration services

Time	Venue	Participants in the meeting
11.05 – 11.45	Vice Rector's Office 3rd Floor	Furtuna Mehmeti, Head of the Quality Assurance Office Florijeta Hulaj, Coordinator for quality assurance at the Faculty level Zija Rexhepi, Vice Rector for Administration Albulena Ramadani, Head of Students Service Office

Meeting with academic staff

Time	Venue	Participants in the meeting

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12.30 – 13:10	Vice Rector's Office 3rd Floor	Blerta Prevalla Krenar Kepuska Laurik Helshani Mentor Hamiti Shpëtim Latifi

Meeting with employers and the industry

Time	Venue	Participants in the meeting
13.15 – 14.05	Vice Rector's Office 3rd Floor	Blerta Thaci Pajtim Gashi Gazmend Jakupi Ylli Qarkaxhiu Atdhe Buja Nusret Bilallaj

Internal Meeting of KAA

Time	Venue	Participants in the meeting
14.10 – 14.20	Vice Rector's Office 3rd Floor	Only KAA staff

Closing meeting with the management of Faculties

Time	Venue	Participants in the meeting
14:20 – 14:30	Vice Rector's Office 3rd Floor	Jusuf Qarkaxhija, Dean of the Faculty Valdete Daku, Vice Dean for Learning

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

AAB College is a private university founded in 2002. It has 14 different faculties which offer various study programs in fields of Economics, Law, Mass Communication, Arts, Social Sciences, English Language, Computer Science, Information Technology and Physical Education at bachelor and master levels. The main campus is located in Prishtina, and there are also two branches in Gjakova and Ferizaj accredited by KAA and licensed by MEST. AAB College has several administrative offices such as Software Development Office, Central Administration Office, Career Office, Transfer Office, Return Office, which are available to students and academic staff.

The Faculty of Computer Science (FCS) at AAB College was initially accredited with a bachelor program in 2010 and with a master level in 2013. Through its study programs, the FCS combines an interdisciplinary core with specialized studies in the profile chosen for each program and provides guidance and prepares students for careers in society based on industry. The FCS aims to continuously provide students with all the necessary theoretical and practical knowledge in all areas of computer science and information technology.

The duties and responsibilities of the management of the FCS are defined under the Statute of the College as well as under the Regulations of the AAB College, which are applicable to all other AAB faculties for the staff and students. The FCS management is structured as follows: The Scientific Teaching Council, The Dean, The Vice Dean for Teaching, Coordinator for Quality Assurance and Coordinator at the branch campus. The FCS has also the Scientific Teaching Council which consists of all the academic staff of the faculty with a regular contract, one member of the administration and one student representative. The Scientific Teaching Council is the highest academic body, which has a host of responsibilities of decision-making and advisory character.

AAB College has carried out a delegation and decentralization of numerous responsibilities from the Rectorate to the Dean's Office. The FCS enjoys academic freedom and independence of action, in terms of functioning, organizing conferences, research work and other academic issues. This autonomy and independence is guaranteed by the Statute of AAB College as well as by other relevant policies governing the general areas of AAB. However,

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faculties are not independent budget units, and therefore the budget is managed by the central level.

Teaching staff at Faculty of Computer Science in total counts 20 full time academic staff and 4 part-time academic staff where 11 of them have a PhD degree. The teaching process is conducted in separate groups and for lectures a group of students consists of maximum 60 students while for laboratory exercises a group consists of 20-40 students. Students at AAB College and FCS come from different areas and cities of Kosovo and neighbouring countries, and recently the number of students has been increasing. A considerable number of students at the bachelor level come directly after the secondary schools.

The study program "Professional Bachelor in Programming" aims to prepare professional programmers and enable them to apply the acquired knowledge in the field of programming languages and to work in the software development field. The mission of this study program is to contribute to the development of professional staff with the latest knowledge and practices in the field of software development, who serve the labour market and society.

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2. PROGRAM EVALUATION

2.1. Mission, objectives and administration

The mission of AAB stated in the self-evaluation of Professional Bachelor in Programming is to contribute to society through offering quality and diversified higher education programs and applied science to the labour market in Kosovo, in region and beyond. Furthermore, through advancement, creation and dissemination of knowledge through scientific research to improve the well-being and health of the population, as well as cultural, social and economic development, as well as providing an environment that results in social mobility and the personal development of the individual, a responsible citizen. The Expert Team agrees that the mission of the Professional Bachelor in Programming is in full compliance with the vision and mission statement of AAB College.

Unlike the existing Computer Science (BSc) program, the Professional Bachelor in Programming study program focuses specifically on coding and programming for the purpose of product development. This program creates more space for students interested only in the field of software development and programming languages and not in other engineering fields. Furthermore, it was designed with inputs collected from various actors, such as local experts who are directly involved in the industry, various companies that AAB College has cooperation agreements, and so on. A number of valuable inputs were collected during the lectures, trainings, workshops but also during the design of the study program. The College respects their advice and has improved the program according to these advice (e.g. shifting from the programming language C++ to Java, from Python to Java in some courses, etc.). This was confirmed at the meeting with heads of the study program and at the meeting with employers of graduates. External stakeholders are also included in surveys regarding satisfaction with the knowledge and skills of students from this program. Also, some teachers that are permanently employed come from the industry. Experts recommend including external stakeholders in the management bodies of the College (e.g. Advisory body or something similar).

Regarding the didactic concept, the teaching methods in this study program include theoretical lectures, practical exercises, seminars, projects, internships, etc. However, defining didactic and research concepts needs improvement. External experts believe that the

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program contains too many different technologies and programming languages. This will cause students to learn the basics from each technology, instead of deepening their knowledge in a few selected ones. Furthermore, the research concept is marginally present in the study program, however since this is a Professional Bachelor study program is it nor expected to have a high involvement of students in the research activities.

In the self-evaluation of this study program it is stated that AAB College has formal policies, guidelines and regulations dealing with recurring procedural or academic issues and that these are made publicly available to all staff and students. This was also confirmed during the meeting with the management of the HEI. Furthermore, after the meetings with management, heads of this study program and teachers, experts gained the impression that staff and students comply with all the internal regulations.

It is worth mentioning that the HEI has two electronic platforms, E-Student and E-Professor. These platforms enable the entire academic process to be documented through an online system which contributes to a much faster and more accurate communication between students and academic staff.

Policies, regulations, terms of reference and statements of responsibility regarding program management and distribution are reviewed at least once every three years and are changed as necessary in certain circumstances. However, the recommendation from the KAA is to review them at least once every two years and amended as required in the light of changing circumstances. The management of the HEI gave us an example regarding COVID-19 pandemic where they had to change policies and regulations in accordance with the new circumstances.

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	X	

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the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.		
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. *Review policies and regulations at least once in every two years.*
2. *Include industry representatives in management bodies of the HEI (e.g. Advisory body).*
3. *Improve the didactic concept of the study program*

2.2. Quality management

The self evaluation report contains a description of how quality management at the AAB College and the FCS works and which instruments it contains. AAB College has a Quality assurance office and at the faculty level there is a quality assurance coordinator who cooperates with the central Quality Assurance Office. All staff participate in self-evaluation

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and quality improvement processes that are integrated into standard planning processes on a semester basis.

The evaluation process is mainly based on questionnaires conducted anonymously online for both academic and administrative staff (once per year), as well as for students (at the end of each semester) that include the evaluation of academic performance, the administrative and technical services, working conditions, the professional and academic support, infrastructure quality, etc. From 2019 the industry and employers questionnaires have been introduced as a basis for the assessment of knowledge, skills and competencies of graduates, as well as for introducing new content within the study program, and the expert team recommends to continue this practice. Quality assurance office collects all data, evaluates them, makes double and random checks, conducts comparison with the results from the past years and based on the results recommends the improvements to the FCS and the College management. The whole process ensures that the minimum quality criteria are met and continuous improvement of the quality of study programs is achieved. Several examples of how the results of the questionnaires are taken into account for further development and improvement of the study program are presented during the meetings with the management and quality assurance representatives, e.g. changing the programming language taught at courses, discussion with teaching staff that have received poor results and comments, organization of additional classes from courses with low passing rate, reducing or increasing the number of students in groups, etc. All above mentioned mechanisms show successful results and ensure the increasing quality of the whole study process and study program. Furthermore, the individual results are delivered to the teaching staff while students and industry representatives are informed in general regarding the improvements based on their answers provided in questionnaires.

One of the major issues in the quality assurance process is lack of proper interest of students for the evaluation of academic staff and administration services which resulted sometimes in a low number of provided answers that are not adequate for a quality evaluation of the obtained results. Therefore, a mechanism or a procedure that will motivate students to participate in surveys and questionnaires should be developed and implemented. This should increase the quantity of results and enable to get a representative sample for analysis and

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evaluation of teachers performance and quality of courses, as well as the whole study program.

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	

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Standard 2.9. The quality assurance arrangements for the program are themselves regularly evaluated and improved.	X	

Compliance level: Fully compliant

ET recommendations:

1. *Develop and implement a mechanism/procedure that will increase the quantity of students participating in surveys and questionnaires in order to get a representative sample for analysis and evaluation of teachers performance, quality of courses and the study program.*
2. *Evaluate the success of the adoption and the effectiveness of learning outcomes.*
3. *Continue with the industry and employers questionnaires on a yearly basis.*

2.3. Academic staff

Teaching staff at FCS in total counts 20 full time academic staff and 4 part-time academic staff where 11 of them have a PhD degree, 5 are PhD candidates, 7 have MSc degree and 1 BSc degree. In the study program 15 full time academic staff and one part time are involved, and therefore the Standard 3.4 which requires that 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 is satisfied, as well as the Standard 3.5 which requires that 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, are satisfied.

The employment procedure of teaching staff complies with the legal requirements since it is conducted in accordance with the Law on Labour of the Republic of Kosovo, the Statute of AAB College, the Administrative Instruction on Accreditation of HEIs in Kosovo, and other AAB internal regulations. Candidates for employment are provided with an employment contract and full position descriptions (under Article 4 Duties and Responsibilities and under the Regulation for Systematization of Jobs). Furthermore, none of the teaching staff has

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another teaching position at other educational institutions and some are involved in the industry mainly part-time as professionals which is allowed and could be even useful for the improvement of the courses content.

Teaching staff has different opportunities for additional development of professional and teaching skills since during the academic year several trainings, workshops or lectures covering different fields are organized, and for teaching staff it is mandatory to attend those training sessions. Furthermore, if new courses are introduced or if teaching staff is missing knowledge at some courses, specific trainings will be organized or professionals from industry will be hired to give those courses. The recommendation is that teachers should create and submit their individual yearly report and plan for professional and teaching skills improvement that should be evaluated each year. The office for human resources has a database with full teaching staff information regarding the publications, teaching, professional skills, CVs, etc., however none of that information is available publicly on the FCS web page. Furthermore, the majority of teaching staff do not have scientific profiles on online scientific platforms (such as Research Gate, IEEE, Google Scholar, etc..) and the recommendation is to create it in order to improve the visibility of the institution.

The responsibilities of teaching staff include their full engagement in all activities within the Faculty, however the community service should be improved. The current teaching workload for a full time teaching staff is between 8 and 12 hours which is within the defined limit, however with the implementation of this new study program with a high number of students it will be higher. The management stated that the teaching workload will not go above the maximal limit and in case of too high number of teaching hours that cannot be covered with the current teaching staff they plan to hire new teaching staff.

Evaluation of the teaching staff is conducted at the end of each semester electronically and anonymously by students and the results are sent to each staff member individually. The evaluation of the results if conducted by the Quality Assurance Office and in a case of issues, needed measures are taken. Furthermore, the results of surveys are taken into account when extending contracts of teaching staff. Part of the teaching staff was evaluated by a low number of students (below 10) and this should be improved in order to get a representative

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sample for analysis and evaluation of teachers performance and quality of courses and the study program.

Strategies for quality enhancement included in the Strategic plan 2018-2022 partially contain improvement of the teaching strategies and quality of learning materials, and therefore it should be emphasized in the new strategic plan (from 2023). According to the official Law and regulation for the teaching staff retired at the age limit of 65 the status of engagement is changed from full time to a part time.

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	X	

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development of teaching staff, with special assistance given to any who are facing difficulties.		
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: Fully compliant

ET recommendations:

1. *Add information about teaching staff teaching and scientific work on the official faculty web page.*
2. *Improve the quantity of students participating in surveys and questionnaires in order to get a representative sample for analysis and evaluation of teachers performance and quality of courses and study program.*
3. *Implement a procedure for teaching staff for submitting an individual yearly report and plan for professional and teaching skills improvement.*
4. *Improvement of the teaching strategies and the quality of learning materials must be fully included in the new strategic plan.*

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2.4. Educational process content

The study program Professional Bachelor in Programming is a professional program which contains several general and fundamental engineering courses and the vast majority of courses introduce the basics of software development engineering. Furthermore, the elective courses that enable students to choose courses according to their interest are also offered. The distribution of total credits required for the study program is 20% for elective courses, and 80% for mandatory courses. The goal of the study program is to organize a teaching process that will bring students closer to the labour market. This is done through mandatory internship, seminars, projects and practical exercises. The study program complies with the level 6 of the National Qualifications Framework. The disciplines within the curriculum are provided in a logical flow and learning outcomes on the program level meet the precise determination of the general and specific competencies. However, since this is a professional study program external experts believe that in general too many different technologies and programming languages are included in the program which will be firstly too difficult to learn for an average student, then will result in learning just the basics from each technology instead of deepening the knowledge in a selected ones, and consequently students will not get enough knowledge and experience from any of the proposed technology and will not be fully ready for the labour market. Therefore, it is needed to reduce the total number of programming languages and technologies in the study program by updating the course content, removing some of the courses or introduce more (double) courses on one specific technology (e.g. have two courses for Mobile Android application programming 1 (basic) and 2 (advanced). Furthermore, course "Project management" should be moved later in the proposed curriculum and the first semester is too early since students first need to acquire knowledge about specific technologies and then work on projects.

The courses within the curriculum have analytical syllabuses that contain discipline's objectives, basic thematic content, learning outcomes, distribution of classes, seminars and applicative activities, students' assessment system, literature, etc. The syllabuses of all courses are distributed to the students through the E-student portal at least one week before the beginning of the semester. These syllabuses are explained and discussed with students in the beginning of each semester. Textbooks for courses are in English language, but other studying materials are in Albanian. In case the student does not have satisfactory language

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skills in English, he/she can choose English for Computer Science as an elective course in the first semester. Assessment mechanisms are also contained within the course syllabus and are clearly communicated to students at the beginning of every course. Teaching staff have sufficient scheduled times in their working hours for consultation for students (two hours per week) and the recommendation from the FCS for students is to meet with the teaching staff regularly.

It can be said that the study program is student-centered since it offers different teaching methods that support active learning process, such as lectures, internships, projects, seminars, laboratory exercises, etc. Furthermore, there is an electronic platform E-Student which contributes to a much faster and more accurate communication between lecturers and students. It is important to note that students can rate their professors and the way courses are conducted at the end of every semester. The results of these surveys are analyzed further measures are taken if needed which means that the effectiveness of planned teaching strategies in achieving different types of learning outcomes is regularly assessed and adjustments are made.

The internship at the FCS is managed by the Career Office in cooperation with institutions that College cooperates with. The internship takes place over three academic years but has no ECTS assigned. The explanation from the management is that ECTS for the internship is assigned through the course Project given in the fourth and fifth semester but from the syllabus of the course it is not visible that it will be conducted as an internship or in cooperation with the industry. In order to facilitate internships, the FCS has signed several cooperation agreements with different institutions. AAB College provides students with a list of institutions that offer internships and students can choose for themselves where they want to go on internship. At the meeting with heads of this study program, it was explained that the internship will take place for one month in the 4th semester, and in the 5th semester students will spend 10 hours a week on internship (teaching in this semester will be done in 3 days per week and 2 days will be free for the internship). While on internship, students have to submit a written detailed report, describing every activity in each day of internship. In order to improve further the cooperation with the industry experts recommend to introduce industry related bachelor thesis preferably with co-supervision by professionals from the industry.

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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 away 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.	X	
Standard 4.6. The student-teacher relationship is a partnership in which	X	

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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.		
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 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.	X	

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Compliance level: Substantially compliant

ET recommendations:
1. *Reduce the total number of technologies and programming languages in the study program curriculum.*
2. *Assign ECTS credits to internships or update the syllabus of the course Project to include an internship.*
3. *Have industry related bachelor thesis (preferably with co-supervision by professionals from the industry).*

2.5. Students

The admission procedure is clearly defined and publicly announced since AAB College publicly announces the competition for the admission of new students at the Bachelor level every year. In the announced competition, the criteria for admission are set, which are determined based on the Statute of AAB College and legal regulations established by KAA and MEST and the criteria fairly apply to all students. To enroll in the study program, a student must have a high school diploma and pass the Matura state exam. Student application data is stored in the database of AAB College. For each registered student an online account is opened which serves to students throughout their period of studying at AAB College. The study groups in lectures are organized to ensure an effective and interactive teaching and learning process (maximum 60 students), but the maximum number of students in practical laboratory exercises should be reduced from 40 to maximum 25 students or more teaching staff and/or experienced student demonstrators per group should be introduced. The proposed number is too big for only one teacher since in the field of programming languages students often need help several times during one exercise that takes too much time and work for only one teacher.

In accordance with the Regulation on Studies of AAB College, feedback to students on their performance (results of assessments) is done no later than seven days from the date of the exam. Students have the right to refuse the grade through the electronic system (within 48 hours), and to be subject to the final evaluation in the next following deadline. Also, a student

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has the right to make a written complaint to the Dean and request an evaluation before commission. Grading is done electronically and the record of student grades is kept in an electronic database. Students can generate the transcript of grades from the system at any time.

The scheduling of exams is regulated by the Central Administration of the College, but in case students have requested for extension of deadlines these requests are always approved (within the provisions of the Regulation). Also, it was said at the meeting with heads of the study program that students with disabilities can take an exam in a modified way. Regarding student support, unfortunately the FCS does not have an established counseling services for students dealing with psychological problems. However, the financial office is responsible to provide counselling to students who have financial problems. Overall, it can be said that the study program is student-centered.

AAB College monitors and analyses pass rates in every course through the e-Service platform. These data are sent to the Office of the Vice Rector for Teaching, who analyses and evaluates each case and in cooperation with the Dean of the Faculty intervenes where necessary (e.g. if the pass rate on a certain course is too low, additional classes are organised - this example was given to the Expert Team by heads of study program).

At the meeting with teachers, it was said that the teaching staff educate students to be honest and fair in their work. The FCS also applies the Code of Ethics and the Regulation of Good Academic Conduct which stipulate that the Dean of the Faculty can report students to a Disciplinary Commission for cases of copying/plagiarism. Furthermore, the teaching staff is using several means to prevent plagiarism and the main for the written papers is the Turnitin platform. Academic staff have sufficient scheduled times in their working hours for consultation and advice to students (two hours per week).

The students' transfer between higher education institutions, faculties and study programs is regulated in formal internal documents (Statute of AAB College and the Administrative Instruction at the level of MEST). The transfer is done through the Office for Transfers in cooperation with the quality coordinator within the Faculty of Computer Science. All students' rights and obligations are made publicly available.

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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 posses 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	
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	X	

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internal documents.		
Standard 5.11. Academic staff is available at sufficient scheduled times or 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. *Reduce maximum number of students in practical exercises from 40 to maximum 25 students or have more teaching staff and/or experienced student demonstrators per group.*
2. *Establish counseling services for students dealing with psychological problems.*

2.6. Research

Scientific research is an important part of the AAB Strategic plan 2018-2022 and several strategic objectives are connected to it. Policies that support high quality scientific research and publications are established and they are also in consistent with international standards and established norms in the field of the study program. Furthermore, the expectations for teaching staff involvement in research activities are clearly specified, and the minimum standards are set in the employment contract.

Although, in recent years an increase in the quantity and the quality of publications in journals and conferences is noticed, still in general high quality publications in journals cited in high quality scientific bases (such as WoS, IEEE, etc) are missing. Furthermore, the FCS is lacking two important aspects that are closely connected to the quality and quantity of the scientific work and the first is implementation and participation in scientific projects and the second is an international collaboration. Both are closely connected with the scientific activity of the teaching staff, and therefore the procedure for stimulating teaching staff to

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apply and conduct scientific projects should be implemented, as well as the mechanisms for improving the international collaboration. Moreover, the majority of teaching staff do not have scientific profiles on online scientific platforms (such as Research Gate, IEEE, Google Scholar, etc..) and the recommendation is to create it in order to improve the global visibility of the institution in the field of science. Alouth AAB College is publishing the Journal "THESIS" it is not covering the Computer Science and IT fields, and therefore it is not closely connected to the proposed study program.

Several examples of students engagement in research projects on other study programs are presented in the Self evaluation documents and during the meetings, however since this is a Professional Bachelor study program is it nor expected to have a high involvement of students in the research activities, rather they should be involved into projects conducted in collaboration with the industry. However, state-of-the-art research results, as well as technologies must be included in the course content.

Policies for ownership of intellectual property for teaching staff are provided as a part of their contract which stipulates that intellectual property rights in any work related to or created by the employee during the employment relationship. However, the rights in a case of students' intellectual property are not regulated, and therefore the procedure and the ownership should be clearly defined and regulated.

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	

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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	
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 6.8. (1) 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 6.9. Policies are established for ownership of intellectual property and clear procedures set out for commercialization of ideas developed by staff and students.		X
Standard 6.10. Students are engaged in research projects and other activities	X	

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Compliance level: Substantially compliant

ET recommendations:
1. *Based on the available budget the limit for scientific publication per teacher per semester should be increased specifically for high quality publications.*
2. *Include state-of-the-art scientific results in courses content.*
3. *Stimulate the application of scientific projects and consequently increase the number of the projects.*
4. *Improve the international collaboration.*
5. *Create scientific profiles on the official web page of online scientific platforms in order to improve scientific visibility of FCS (such as Research Gate, IEEE, Google Scholar, etc..).*
6. *Regulate the intellectual property rights of students.*

2.7. Infrastructure and resources

AAB College operates in three campuses, one in the city of Prishtina which is the main campus and two others in two others in Gjakova and in Ferizaj. In Prishtina, the learning process takes place in the building owned by AAB with around 32,000 m2 and which includes large classrooms, small classrooms, amphitheatres, laboratories, special spaces for students, offices for deans and management, sanitary units and recreational spaces for students, etc. The FCS will conduct the study program Professional Bachelor in Programming in several classrooms and five laboratories with a full IT equipment and the necessary software that are not shared with other faculties. Although the capacity of laboratories is large, 30 to 40 students/computers (one computer per student), this is a too big number for only one teacher since in the field of programming languages students often need help several times during one exercise that takes too much time for one teacher. Therefore, the size of the groups must be smaller.

From the video presentation of AAB College it can be seen that the FCS has more than adequate infrastructure for the organization of the teaching process and for conducting basic research work. However, the large requested number of students (200) for the new study

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program could cause problems in organization of the teaching process, especially laboratory exercises, and therefore it should be lower. Furthermore, by lowering the number of groups on laboratory exercises teaching capacities will be insufficient. Moreover, such a big number of students could lead to decreasing the quality and knowledge of students enrolling in the study program, as well as decrease the quality of the overall teaching process and therefore it should be reduced to maximum 125 students per year.

Regarding the administrative support, the Faculty has two administrative staff which provide administrative services, but there are also other offices that support the teaching process, the academic staff and students such as: Central Administration, Office for Software Development, Office for IT Support, Transfer Office, Career Office, etc. Regarding the online resources for students there is an electronic platform e-Student used for most of the services such as posting teaching materials and giving grades by teaching staff and creating reports and student transcripts by administrative staff.

According to the Statute of the AAB College and Regulations of the AAB College the Faculty enjoys academic freedom and independence of action, in terms of functioning, organizing conferences, research work and other academic issues. However, faculties are not independent budget units, and therefore the budget is allocated by the AAB management for all academic units. As stated in the Self report document, AAB College budget is managed efficiently and the financial viability was also ascertained in the assessment of the independent audit companies. However, no financial plan at the level of the study program that would demonstrate the sustainability of the study program for the minimum next three years was provided.

As it can be seen in the video, the campus of Prishtina has two libraries in a very good condition with enough teaching materials and reading space in reading and self study rooms also partially equipped with computers, satisfying KAA requirements. Although all students and teaching staff have access to the J-STOR that offers them an access to scientific databases none of the mentioned scientific databases in the self evaluation report is connected to the computer science field, and therefore it should be added. The infrastructure and facilities have electric stairs, elevators, emergency exits and all relevant infrastructure for students with special needs.

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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; 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.	X	
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	X	

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		
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. *Development of a financial plan at study program level that would demonstrate the sustainability of the study program for the minimum next three years.*
2. *Reduce the number of students that will enroll in this program to maximum 125 per year.*
3. *Enable access to the scientific databases from the computer science field.*

3. OVERALL EVALUATION AND RECOMMENDATION OF THE ET

AAB College as a large non-public institution has an important role for the local but also regional higher education landscape. The constant growth is present in the number of students as well as in achieving a high degree of institutional maturity in terms of organization, management and leadership. The teaching and administrative processes of the Faculty of Computer Science are adjusted to the needs of students and the general goals of the proposed study program "Professional Bachelor in Programming" are in line with the mission and strategic goals of the Faculty and AAB College, as well as the needs of the labor market.

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However, there are several improvements that are necessary in order to further improve the quality of the proposed study program:

- Reduce the planned number of enrolled students from 200 to 125 in order to keep the quality and avoid infrastructure and workload issues.
- Improve further the study program curriculum by decreasing the number of included different technologies and programming languages.
- Increase the scientific activity and visibility of the FCS by increasing the international collaboration and scientific activity of teaching staff by stimulating the application of scientific projects and consequently increasing the number of the projects as well as promoting it on the official faculty web page and online scientific platforms.
- Improve the quantity of students participating in surveys and questionnaires in order to get a representative sample for analysis and evaluation of teachers performance and quality of courses and study program.
- Although the organization of the internship is adequate it is needed to assign ECTS credits to internships to make it more formal.
- Increase the involvement of industry representatives in the FCS regular operations and teaching process, as well as in the decisioning system and the management.
- Although, there is enough capacity to organize laboratory exercises in large groups up to 40 students this maximum number should be reduced to maximum 25 students or more teaching staff and/or experienced student demonstrators per group should be introduced since the one teacher cannot provide a high quality support to all students in one big group.
- Development of a financial plan of the proposed study program in order to demonstrate the sustainability of the study program for the minimum next three years.

Based on the study of extensive documentation and an online visit to the Faculty of Computer Science that was very professionally organized, the expert committee for the accreditation process prepared this report based on defined Standards & performance indicators for external evaluation according to the Accreditation Manual of KAA (July 2018) and gave recommendations for further quality improvement. Since this is an accreditation of a new study program part of the standards was evaluated based on the experience from similar study program "Computer Science (BSc)" since majority of the teaching staff will be the same at

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both programs, there is partial similarity in the curriculum and also part of the courses have a similar content. The Expert Team wants to point out that the self evaluation report is well written and elaborates on all the standards, which has greatly facilitated this evaluation. We believe that you have developed a good study program that has a bright future, and we encourage you to improve it further and to continue with good practices.

Considering the documentation provided and discussions with the program development team, experts gave the following compliance level:

Standard	Compliance Level
Mission, objectives and administration	Substantially compliant
Quality management	Fully compliant
Academic Staff	Fully compliant
Educational Process Content	Substantially compliant
Students	Substantially compliant
Research	Substantially compliant
Infrastructure and resources	Substantially compliant
Overall Compliance	**Substantially compliant**

In conclusion, the Expert Team considers that the study program Professional Bachelor in Programming offered by AAB College, Faculty of Computer Science is Substantially compliant with the standards included in the KAA Accreditation manual and, therefore, recommends to accredit the study program for a duration of three years with a number of 125 students to be enrolled in the program.

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4. APPENDICES *(if available)*

None

Expert Team

Member

_____
Signature   Josip Balen   07.04.2021.

Member (Student)

_____
Signature   Laura Palac   07.04.2021.

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