



Republika e Kosovës
Republika Kosova - Republic of Kosovo
Agjencia e Kosovës për Akreditim
Agencija Kosova za Akreditaciju
Kosovo Accreditation Agency



PBHE “Universum International College”

Cyber Security
Bachelor Professional

Re-accreditation

REPORT OF THE EXPERT TEAM

Table of Contents

1.	2
1.1.	3
1.2.	4
1.3.	5
2.	6
2.1.	6
2.2.	8
2.3.	10
2.4.	13
2.5.	16
2.6.	18
2.7.	20
3.	21

1. INTRODUCTION

1.1. Context

Date of site visit:

Expert Team (ET) members:

- *Dr. Anastasios Dagiuklas*
- *Dr. Peeter Normak*
- *Dr. Seifedine Kadry*
- *PhD Cand. Damian Michalik, Student Expert*

Coordinators from Kosovo Accreditation Agency (KAA):

- *Ilirjana Ademaj-Ahmeti, Senior Officer for Evaluation and Monitoring*

Sources of information for the Report:

- *Accreditation Manual*
- *The Manual for External Evaluation of Higher Education Institutions*
- *Self-evaluation Report*
- *Syllabi of the courses*
- *CV-s of the academic staff*
- *Licence agreement between the Arizona Board of Regents and Universum College*
- *Student Handbook for 2021-2022*
- *Accessibility and Inclusiveness Rules and Regulations*
- *Policy on Anti-discrimination for Academic and Administrative Staff*
- *Childcare Services Agreement Between Universum College and the Finnish School of Kosovo*
- *Smoke-free Policy*
- *Policy Handbook on Health Support Center & First Aid*
- *Policy on Anti-discrimination of Students*
- *Gender Equality Plan 2022-2027*
- *Access to Universum College Sport Facilities*

Criteria used for institutional and program evaluations

- *Accreditation Manual*

1.2. Site visit schedule

Time	Meeting	Participants
09:00 – 09:50	Meeting with the management of the faculty where the programme is integrated	Alejtin Berisha Shqipe Gerguri Rashiti Stephen Keck Isabel Salvat Jenny Orlova (Online)
09:50 – 10:35	Meeting with quality assurance representatives and administrative staff	Uran Rraci Donjeta Pllana Nazim Haliti Uresa Vllasa
10:40 – 11:40	Meeting with the heads of the study programme	Ramadan Dervishi Arianit Krypa Nysret Demaku
11:40 – 12:40	Lunch break	
12:40 – 13:10	Visiting Facilities	Arlinda Qehaja
13:10 – 13:55	Meeting with teaching staff	Ilir Berisha Reshat Selmani Qendrim Hyka Kimete Bilalli Valmir Sinani Arlinda Berisha Martin Cunningham Filip Ruxho
14:00 – 14:45	Meeting with students	Eshref Shala Kujtim Gjokaj Blerton Hoti Alban Krasniqi Melos Buçinca
14:50 – 15:35	Meeting with graduates	Shkodran Hasani Petrir Elshani Albion Burrniku Elita Rexha Mehreme Gashi Faton Nuha
15:40 – 16:25	Meeting with employers of graduates and external stakeholders	STIKK - Vjollca Çavolli TIVE - Albin Bushi Linkplus - Iliriana Ibraj Kidsday - Getoar Krasniqi Tenzor LLC – Gezim Hapciu

		Crea CO – Avni Ternava
16:25 – 16:30	Internal meeting of KAA staff and experts	
16:30 – 16:35	Closing meeting with the management of the faculty and program	

1.3. A brief overview of the institution under evaluation

Universum International College is a private institution established in 2005 with three campuses located in Prishtina, Ferizaj, and Gjakova. It offers a broad range of academic fields, with 13 Bachelor and 3 Master study programs. These range from traditional subjects such as English and Political Science, to locally demanded areas of study like Dentistry and Fashion Design.

Universum International College thrives on providing high quality, accessible and affordable educational opportunities to Kosovars and international students through teaching excellence, life-long learning, applied research and partnership building, attempting to form the students to be thoughtful, responsible and successful. In 2023, the College formed a strategic partnership with Arizona State University (ASU), becoming part of the Cintana Alliance. This membership allows exchange opportunities for both students and academy staff across the Cintana Alliance's institutes. Certain study programs even offer the chance to obtain double degrees in collaboration with foreign universities.

Management of the College is overseen by the Board of Trustees, who are in charge of developing and implementing the overall strategy. In terms of academic affairs, decisions are controlled by the Academic Council, who is responsible for delivering and implementing academic policies and controlling performances, among several other roles. High-ranking executive positions within the College consist of the President, Executive Vice-President, Vice-President, Rector, Vice-President for Operations, and Branch Manager. Since the start of 2024, the College has been segmented into three faculties.

The Cyber Security Bachelor Professional study program was accredited in 2021 for three years and was confirmed as being substantially compliant with the standards, with a number of 70 students to be enrolled in the program.

At the completion of the program, students are expected to achieve the following aims and learning outcomes:

- Demonstrate understanding of fundamental principles, concepts, and theories in cybersecurity.
- Attain proficiency in discrete mathematical ideas, encompassing sets, logic, and techniques for establishing proofs.
- Analyse and forecast upcoming trends and threats in the field of cybersecurity.

- Formulate and implement response strategies for handling cyberattacks, with the aim of minimising their impact.
- Conduct a critical assessment of the risks related to information security.
- Recognize emerging technologies in cybersecurity and assess their potential impact on the field.
- Engage in research to contribute to the development of new solutions and practices
- Adhere to ethical and legal standards when conducting system testing.
- Collaborate with peers to address cybersecurity challenges across diverse contexts.
- Complete a cybersecurity thesis that demonstrates the practical application of knowledge and skills in a real-world setting.

The learning outcomes are much more elaborated and adequate compared to the learning outcomes of 2021.

2. PROGRAM EVALUATION

2.1. Mission, Objectives and Administration

The mission of the College is “to support our students to become good citizens, successful & broad-minded leaders and thrive in the Revolution 4.0, the digital and globalised era. We do this by providing one-on-one academic & life coaching, putting our students and learning at the centre in an innovative, digitally enhanced environment that fosters creativity, inquiry, teamwork, innovation and entrepreneurial mindsets. Our commitment with quality, teacher excellence and applied research builds the bases for a strong and vigorous nation and region.”

The mission is built upon the following strategic pillars:

- I. Student and Learning at the Center
- II. Quality Improvement
- III. Innovation and Entrepreneurship
- IV. Digital Transformation
- V. Internationalization

Therefore, the mission does not specify any study fields. And although the meaning of Revolution 4.0 is not clear (it probably means Industrial Revolution 4.0 or industry 4.0 instead of more recent Industrial Revolution 5.0), the study program must be considered as being consistent with the overall mission statement of the college.

Even though the higher institution representatives follow the mission statements, there are no specific KPIs assigned to specified strategic pillars. Quantitative-based indicators assist in sustainable growth of the College and reveal its strengths and weaknesses.

The expected learning outcomes are developed in cooperation with ASU and are adequate. Even circa 60% of courses are aligned to the corresponding study program available in ASU. They are consistent with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.

The study program has an applied research focus: students have opportunities to be engaged in research projects, current research findings are included in course materials, and an emphasis is put on the development of research skills. Student centricity and market orientation were stated as the overarching principle, and the practice and experience of ASU is taken as an example.

The experts were provided only with the *Staff Manual* and *Code of Ethics* (both in Albanian language) as documents describing the formal policies, guidelines and regulations; there may have been also some more, but only in Albanian language. The experts were also not able to find English translations of the necessary documents – *Statute of the College*, *Development Plan*, *Studies Regulation*, etc. – on the website of the College. For a higher education institution with the word “international” in its name, such a small number of documents in English was somewhat unexpected. On a request of the ET, English summaries of some documents have been provided; however these documents must be publicly available.

The formulation of the standard “All staff and students comply with the internal regulations relating to ethical conduct in research, teaching, assessment in all academic and administrative activities” was transferred into the SER, with no evidence or even explanation. However, the College has adopted a Code of Conduct which also contains articles *Ethical and Professional Responsibilities of Academic Staff* and *Ethical Obligations and Conduct of Students*.

Some of the documents presented to the experts were from 2013, one even from 2009. For example, RREGULLORE PËR TRANSFERIMIN E STUDENTËVE NGA BARTËSIT E TJERË TË ARSIMIT TË LARTË TË AKREDITUAR. Several other documents were older than 5 years. For example, a document that fixed some tariffs was implemented in 2016. Some documents did not have the date of confirmation at all. All these documents had naturally the name *Universum College* as the name of the College. Even though there is a tension to adjust documents to the Cintana Alliance, it is still expected to implement transparent procedures of revising documents.

Compliance level: Substantially compliant

ET recommendations:

1. *Establish Key Performance Indicators which will assist in guiding the growth and regularly track the progressive evolution of the College.*

2. *The most important college regulations must be translated into English and made publicly available through the College website.*
3. *The official documents must be revised, updating amongst others, the name of the College. Moreover, implement a transparent procedure of updating documents.*

2.2. Quality Management

The quality system of the College is exposed in the *Guidelines for Quality Assurance at Uni – Universum International College*. Separate chapters are on academic matters, on domestic and international cooperation, and on student operations and services. Each chapter is divided into two-level subchapters. For example, 3.1. *Internal evaluation of the program* and 3.1.1. *Implementation of recommendations from KAA accreditation reports*. The College has also implemented a peer-to-peer evaluation for academic staff where academic staff share experience among themselves.

The College has implemented regular quality assurance instruments; some are adopted from ASU. These instruments include: students satisfaction surveys, focus group reviews, evaluations of academic staff, alumni surveys, exit surveys, training of academic staff, etc. The results of students' surveys are analyzed and discussed in relevant departments.

According to the Guidelines for Quality Assurance, program evaluation relies on the following data: student retention rate, graduation rate, student satisfaction rate, student withdrawal rate, pass rate of students.

While there are instruments in place for quality assurance of courses, there is no continuous and consistent quality system implemented for the whole study program. No person is assigned the responsibility for the quality of the study program. A group of staff called “Head of the study program” is formed, but personal responsibilities for heads of study programs are not stated (although responsibilities should be personal, not collegial). No program committee or council of the study program is formed that would include representatives of all major stakeholders (professors, students, graduates, employers, professional unions etc).

The fact that the Self-Evaluation Report and other documents provided to the experts did not contain almost no information that would allow experts to make evidence-based assessment about quality processes at the College indicates that not all quality assurance processes – this case composing an adequate and comprehensive self-evaluation report – are conducted on a satisfactory level.

Student survey data are collected at the end of each semester. Additionally, focus groups of students are formed to discuss various issues. To assess the employability of its graduates, the college conducts regular online surveys every semester. According to the recommendations of the 2021 Accreditation Report, a *Graduate Exit Survey* is developed about graduates' overall

8

satisfaction with their academic experience, student services and their readiness for the job market. Another survey is for employers to assess graduate readiness (what skills graduates have, what skills they can easily learn, what skills they are lacking, and about the study programs). However, the results of these assessments are available on the College intranet and not on a public website, despite the recommendations of the 2021 Accreditation Report.

Students confirmed that their recommendations on the content of courses and even in introducing new topics was considered and sometimes taken into account. On the other hand, both graduates and employers of graduates have proposed a number of improvements during discussions with the experts. This means that the feedback system from students, graduates and employers has room for improvement.

Some concrete examples of suggestions of students, graduates and employers:

- electives should be possible also in semesters 1 to 3;
- there should be more extracurricular professional activities like boot camps or hackathons;
- more real-life examples and case analyses;
- more practical usage of hand-on tools;
- in the subjects, deal more various tools and methodologies used in companies;
- pay more attention to developing students' soft skills;
- invite more top experts from the industry to discuss latest achievements.

Academic Program Internal reports are conducted every year. External reviews are conducted according to the schedule of the accreditation conducted by KAA (the last accreditation was conducted in May 2021).

The Guidelines for Quality Assurance was revised in 2023.

Compliance level: Substantially compliant

ET recommendations:

1. *Nominate **one** academic member of the Faculty as a responsible head/curator of the study program who has the full responsibility on the quality of the study program.*
2. *Determine authority and responsibilities of the curator explicitly in the university regulations.*
3. *Form a permanent council of the study program, that includes representatives of employers, partners, students, graduates and some key academic staff including other heads of the study program. The task of the council will be to propose recommendations for further improvements of the study program based on surveys of all stakeholders, international development trends of the academic area and the needs of society.*

4. *Develop and implement mechanisms that ensure the quality of the documents of the College, including self-evaluation reports of study programs.*

2.3. Academic Staff

Recruitment of new staff is conducted in several stages. Upon the request of an academic department, the President decides on the opening of the academic position. Staff recruitment is carried out through public announcements via different information channels (job portals, College website, social networking sites, newsletters). Candidates are provided with a full job description along with specific KPIs. The final step consists of orientation and integration of the elected staff member.

Legal requirements set for teaching staff are met: the employment of academic staff is done in full compliance with the *Law on Labour*, the *Statute of the College* and the *Administrative Instruction on Accreditation of HEIs*: at least about 61% of staff has full-time positions and all staff announced for the study program have at least a master's degree. The requirement for the academic staff not to have more than 1,5 positions in total is included in the employment contract of each academic staff.

There are twenty-four (24) academic staff that have been recruited to support the programme. Seven (7) academic staff have got PhDs in different technological Computer Science areas, two (2) are PhD candidates; however the remaining academic staff (15) have got an MA and not MSc as expected in a technological area. The total number of academic staff indicated above 24, out of them, 17 are full time.

The following list highlights the expertise of the vast majority academic staff, after analysing their CV:

- Armend Salihu has expertise in IT auditing
- Nysret Demaku has expertise in computer networking technologies
- Ilir Berisha has expertise in Mathematics
- Armend Berisha has expertise in Education
- Alejtin Berisha is the CEO and President of the College
- Arianit Krypa has expertise on Management Information Systems
- Besart Prebreza has expertise in Cyber Security
- Rrezart Prebreza has expertise in Programming
- Arianit Krypa has expertise in Information Systems
- Albulena Luzha is an academic in English language
- Labinot Topilla has expertise in Engineering
- Ramadan Dervishi has expertise on IT systems
- Gezim Sejdu has expertise on Big Data

10

- Artan Aliu has expertise in English Literature
- Abdulla Zejnullahu has expertise in mathematics
- Besiana Hasi has expertise in Information Technologies (CV provided in Albanian)
- Besmir Salihu has expertise in Biomechanics (CV provided in Albanian)

The following teaching team is not listed in the Table with the academic staff:

- Donjeta Zejnullahu has expertise in academic writing.
- Lavdim Halilaj has expertise in digital marketing

The ET, has the following comments for the CVs provided:

- There are not enough staff with expertise (both theoretical and practical) in different areas of cyber security to cover the vast majority of topics in Year 2 and Year 3 (e.g. Advanced Penetration Testing, Mobile Security, AI in Security etc).
- The CVs provided are not homogeneous. There is a lack of information related to scientific publications and professional accreditation that is important in Cyber Security.
- The academic staff have used their personal and not the professional email address in the CVs.
- No sufficient information has been provided regarding the academic staff workload teaching in the three IT Programmes offered by the Computer Science Department.
- There are few cases where academic staff appear to have the same surname.

This is a Professional Practice Programme on Cyber Security. There is a lack of professional expertise in many areas (e.g. Advanced Penetration testing, Cloud Security, Mobile Security, Artificial Intelligence and Machine Learning in Cybersecurity etc). This Programme requires instructors that have Professional Accreditation in Cyber Security (e.g. CISSP, OSCP, CEH etc). The College needs to invest to train key academic staff to obtain these certifications.

The College has signed more than 200 bilateral agreements allowing academic staff to carry out secondments in peer institutions abroad. The teaching staff have additional opportunities for professional development through collaboration with partner institutions, especially with Arizona State University. The College has also participated in several capacity projects (e.g. REBUS, CONSUS, ITEM, E-VIVA, STEPS, INTERBA, DRIVE, KALCEA, STEMedu, IDEA). The College also provides to its staff a variety of on-site training options (on teaching methodology, curriculum and syllabus development, online teaching, using digital tools in teaching, online assessment methodologies, academic writing, etc.); special on-boarding courses are offered for newly employed staff.

There are three types of academic staff evaluations: 1) Mid-semester and semester evaluation, conducted by students who fill out a questionnaire on teachers' quality, pedagogical methodology, evaluation methodology, promotion of classroom debate, etc; 2) Evaluation by professional parties (ASU and Pearson institute have been mentioned), 3) Regular evaluation by the Head of Department on an ongoing basis. However, no regular development discussions are conducted – face-to-face discussion only takes place if the head of department finds it necessary to discuss some aspects presented in the self-evaluation report. The results of evaluations are not made public.

The College has established a Center for Excellence in Learning and Teaching (CELT), which trains teachers on various topics. Another instrument is the Committee for Evaluation of Teaching Methodology, which serves mainly for sharing experience. The responsibilities of this committee, as well as of CELT, are described in the Guidelines for quality Assurance at Universum International College.

Compliance level: Substantial compliant

ET recommendations:

- 1. The ET recommends that the CV template must be homogenised, including information about academic studies, publications and Professional certifications related to Cyber Security.*
- 2. Recruit permanent academic staff (at least three academics) in the area of cyber security (Penetration Testing, Information Security, Mobile/IoT security).*
- 3. Few academic staff from the team (minimum two) must obtain important certifications in cyber security (e.g. OSCP, CEH, CCNP, CISSP etc)*
- 4. Introduce mandatory yearly individual development appraisal process of the academic and administration staff by their line-managers using annual self-evaluation reports.*
- 5. Engage ASU academic staff in the teaching and research process that would assist College's growth.*

2.4. Educational Process Content

The Professional Bachelor of Cyber Security program consists of 180 ECTS that is carried out through six semesters. Each semester counts for 30 credits. This is a Professional Paractice programme. It is expected that the hours allocated to Exercise activities per module must be higher than the Lecture hours allocation. However, this is not the case.

The general learning outcomes and the content of the study program have been defined. However, Bloom's Taxonomy Learning Outcomes need to be adopted so that all learning outcomes can be measured. The first two semesters consist of six courses (5 ECTS each). The third and four semesters consist of four mandatory courses and one elective course. The fifth includes three courses and 2 electives and the sixth semester includes two mandatory courses, internship and the *Thesis*.

The study program has defined 10 learning outcomes. Subjects are in general in a logical order and have relatively detailed lists of learning outcomes. However, the number of hours allocated to exercises is much less than those of lecture hours, regardless of the practicality of the subject. The study programme follows a basic flow. The first year includes courses that include fundamentals in the areas of mathematics, programming, and cyber security fundamentals that are important for the technological subjects that are covered in the second and third year. There is a lack of expertise by the academic staff to support several topics (e.g. Mobile Security, Advanced Penetration Security, Mobile Security).

Cybersecurity is an extremely broad area, and no study program can cover equally all its aspects (for example, ACM divides it into eight knowledge areas: Data security, Software security, Component security, Connection security, System security, Human security, Organizational security, Societal security). The SER does not explicitly describe where the curriculum is supposed to fit within the comprehensive, field-wide cybersecurity landscape.

The curriculum as a whole (compulsory and elective) covers the area of cybersecurity relatively well. However, the bulk of the cybersecurity content is contained in 18 electives, from which each student must select 4. Thus, the cybersecurity competency of any individual student remains relatively limited. At the same time, ICT management is one of the mandatory subjects whose suitability for a bachelor's degree program is questionable. Therefore, the curriculum structure is more suitable for master's programs, where students already have a broad background of professional knowledge, and specific interests can be honed through electives.

The program is compiled in a form that meets the standards required by the Ministry of Education, Science, Technology and Innovation of Kosovo and the Kosovo Accreditation Agency which have defined European standards for study programs. Each course includes a description, course objectives, expected learning outcomes, and the student workload.

Additionally, teaching methods, assessment methods, as well as basic and supplementary literature, have been provided within the course description.

A few issues have been identified:

- It is not very clear how attendance is monitored on each course.
- There are no clear pre-requisites in each course.
- It is not clear the process that would follow in a case that a student fails in a number of modules within a year. These modules will be carried over next year. The workload must be realistic. A N+3 rule must be applied to each semester.
- It is not clear whether extra support sessions are provided to students that have failed in a course.

The delivery of different subjects is done through lectures, teaching discussions, case studies and classroom presentations. Both formative and summative assessments, group-based and examinations have been considered. There is a need to consider a moderation process regarding coursework and examination paper specifications. It is not clear how individual contributions in group-based projects are assessed. There are no specific arrangements for students that may fail in courses. Extra support is needed and this needs to be reflected on students' timetable.

Students utilize knowledge of mathematics, programming, networking, cryptography and cyber security in order to effectively analyze a diverse set of problems in different areas. For this reason, a variety of teaching methods has been used, including small group teaching, regular mentoring of research work, seminars, etc. It is not clear whether the Faculty provides support for students with disabilities.

The grading system used is that used in all Balkan countries. 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. After the end of semester, students' success rate for each course is presented in the form of a report. The criteria for each grade are described in detail.

The study program includes an *Internship* course (8 ECTS). During the classes, students learn how to write a CV and how to prepare an application form. If students are unable to secure an internship, The Career and Welfare Office will assist them in their search. The College has signed numerous agreements allowing students to meet with potential employers with whom they can reach agreements for internships and employment. The number of internships is among the KPI's of the College.

There are several weaknesses that have been identified:

- The SER states that “we are actively integrating Arizona State University's (ASU) advanced content into our curriculum” and that the decision has been made to adopt 5-7 ASU courses each semester. However, no details are provided. There is no mention of taking into account broader international experience, in particular the ACM's

Curricula Guidelines for Computer Science programmes (<https://www.acm.org/education/curricula-recommendations>).

- The academic delivery team does not have certifications in the area of Cyber Security (e.g. CISSP, CCNP, OSCP, CEH).
- There is a lack of clear mapping between the Study Programme and course learning outcomes.
- Study programmes in Computer Science and Cyber Security should share courses in Year 1 so that a better optimisation of teaching staff workload is planned.
- There is a need to embed more tools and practical activities throughout different courses.
- Courses related to soft-based skills “*Project Management*”, “*Ethics*” and “*Academic writing*” must become mandatory.
- The module “*Basics of electronics*” in Year 1, is not related to Cyber Security and must be replaced.
- The module “*Windows and Linux Server*” must be reshaped with a course in the area of Principles of Operating Systems.
- Different programming languages (high-level: C/C++, scripting: Python) must be introduced to the course “*Introduction to programming*”. Web technologies must be introduced as a separate course.
- The practical activities must be further improved in all courses, by introducing a few tools that are important in the Professional practice.

Compliance level: Substantial compliant

ET recommendations:

- *Revise course learning outcomes by taking into account ACM recommendations and accreditation/certification programmes (e.g. CISSP, CCNP, CEH etc).*
- *A common first year is recommended for Computer Science and Cyber Security Professional study.*
- *There is a need to revise the hours between Lecture and Exercise activities. The number of exercise hours must be substantially increased and must be higher than the lecture hours. More tools (Minimum two) must be used on each course for the practical activities. The textbook list provided in each course must be revised. Books published in the last 5 years must be provided for all courses.*
- *The ET recommends that courses related to soft-based skills are made mandatory (Communication Skills and Project Management).*
- *The courses “Cloud Security”, “Cloud Security” and “Data Privacy” must become mandatory. The academic team must read the ACM guidelines regarding the important topics that must be covered.*

15

- *The ET recommends that there must be a cap on the maximum number of courses that can be carried out from the previous year to the next year (No more than 3 courses per semester must be carried over in the next academic year).*
- *The ET recommends that a moderation process regarding coursework and examination paper specifications must be introduced.*
- *The ET recommends that specific arrangements must be done for students with disabilities.*
- *The ET recommends that extra support sessions must be provided to students before the resit attempt.*
- *The ET recommends that prerequisites are required on each course description.*
- *The ET recommends that the Program must clarify the maximum number of attempts yearly on each course.*
- *Guest Lectures from the Industry must be introduced to all courses.*
- *The ET recommends that extracurricular activities (e.g. hackathons, bootcamps, IEEE student branch, etc) are established to provide extra support to students.*

2.5. Students

General principles of admission are stated in the *Statute* of the college and the general procedures are stated in the *Regulation of Undergraduate Studies*. Admission to the studies is done on the basis of a public call and admission criteria and procedures for new students will be applied to all students regardless of their background.

Students enrolled must submit a birth certificate, high school diploma and transcript of records and Matura test certificate. Those who have completed their education outside of the Republic of Kosovo should submit legal documents issued by the Ministry of Education, Science and Technology of the Republic of Kosovo. Applicants should also complete the application procedures at the College and sign a contract of the study program if they meet eligibility criteria.

During the site-visit 3 computer laboratory rooms were presented to the RT, each having 15-20 computerised work-places. In the rooms is also enough space for those who will use their own personal laptop computer. The students said that normally there are not more than 15 students in the laboratory.

Concerning feedback to students, the college follows the *FIDeLity Feedback* principles, where the feedback needs to be given frequently, immediately, in a discriminating and loving way. According to graduates, the HEI representatives implement all important matters pointed out by students.

The results obtained by the students can be accessed through the DMIS information system or Moodle learning management system. Grading is done electronically for each course and a transcript of records can be generated at any time.

According to the SER, examinations can be held individually upon the request of students (respecting their work schedule), as well as any other request inquired by a formal request by students is well considered.

The College uses a DMIS information system that stores and processes comprehensive academic information: student background data and personal information, grades, financial reports and passing/failure rate per courses. Students can check their scores, grades, and financial statuses online. They also can reject, accept, or request clarification about their scores.

The college uses an integrated software Platforma Akademia which checks the plagiarism and authenticity of the work submitted. It also prevents multiple submissions of the same or similar texts. Use in the submission of assignments and research papers is mandatory for all staff and students.

The students are informed about their rights, resources and facilities as well as their obligations and issues of non-academic conduct already on the orientation day. The rights and regulations are stated in the Statute of the College as well as in the Student Handbook which are publicly available documents. Obligations are also provided under the contract which the student signs upon enrolment in the College. The procedure for possible appeals is also described in the Student Handbook. All students' rights and obligations are made publicly available.

The students' transfer is regulated in the *Regulations for the Transfer of Students from Other Accredited Higher Education Providers*. A transfer of students from another higher educational institution is enabled only if a previous academic program is relevant, includes courses of similar nature and the relevant courses are acknowledged by the respective academic staff. Transfer candidates to other institutions must spend at least one academic year at the College prior to their graduation.

The College is well known in Kosovo for its extensive involvement in the Erasmus Plus project. Students express satisfaction with not only the services provided, but also the wide range of partners associated with the HEI. Overall, the institution enables students to actively engage in international higher education, thereby fueling their academic growth.

While meeting with students, they did not complain about the availability and guidance of the academic staff. On the contrary, lecturers mentioned at the meeting that they spend relatively more time on student guidance than is customary in universities.

Moreover, students and graduates noticed that there is still room for improvement in terms of start-up incubation as well as additional lectures or materials based on cutting edge solutions like AI. This interest might be profitable for many study programmes so it is recommended to further expand learning support mechanisms.

Compliance level: Fully compliant

ET recommendations:

1. *The ET recommends that a clearer student selection process must be defined.*
2. *The ET recommends that policies must be applied to manage drop-rates.*
3. *The ET recommends that a strategy must be adopted to reduce the number of years in the field of study.*
4. *Further expansion of support mechanisms offered by the College, i.a. start-up incubators and additional activities for cutting edge solutions.*

2.6. Research

The College recognizes innovation and entrepreneurship as key drivers of development of our region and particularly of Kosovo. The College has defined a strategy to bring innovation in education. However, no sufficient information has been provided about enterprise and research activities in the areas of cyber security. Since this is a Professional Practise, the College must establish activities so that graduates can obtain various Cyber Security accreditations.

According to the SER, the academic team aims to undertake research projects that follow the nature and mission of the institution. The College financially incentivises its staff to publish in platforms that the College has the following mechanisms:

- Research Coordinator, which is also Chair of the Research and Faculty Staff Development Committee.
- Research Funding and Research Incentives, which are available for the academic staff and students. Communicating intellectual contribution and impact, which is done through various workshops, trainings, seminar in cooperation with various stakeholders.
- Research Facilities – various facilities and infrastructure as well as access to wide range of databases made available through our international partners (University of Northampton, Ludwigshafen University, Pearson Education, Kaajani University, Arizona State University – Online Content Repository. etc.).

Although there is a process to manage research activities, funding and output centrally, limited evidence has been provided. The vast majority of academics hold an MA and not MSc and have very limited expertise in the area of study. Most of the CVs lack information about research and enterprise activities in the area of Cyber Security. Additionally, there is limited experience in key areas in cyber security (e.g. Cyber Security, Cloud Security, Wireless Security, etc.).

The general principle that academic staff are encouraged to include in their teaching information about their research and research development trends is stated in the relevant documents of the College: Research Strategy, statute of the Research and Innovation Hub, job descriptions and employment contracts. Apart for some activities in the areas of Blockchain and IT Auditing, research and enterprise activities in important areas of cyber security are rather limited. The academics do not hold any accreditation certification that is important for the Professional degree to support research-related activities.

Additionally, academic staff have not provided any evidence about their involvement in either R&D projects or participation in scientific conferences or professional activities in cyber security. According to the employment contract, each academic staff is obliged to produce at least one publication per year. However, most of the staff did not fulfil this obligation, since their expertise does not lie in the areas of cyber security. Therefore, the vast majority of academic staff do not meet Standard 6.7.

In response to the request of the ET to provide documents regulating the ownership of intellectual property and procedures on commercialization of ideas developed by staff and students, two documents have been submitted: 1) *Policy Handbook of Data Protection Policy* and 2) *Technology Policy*. None of these documents provide information about the commercialisation process of innovation developed by staff and students. Regarding the intellectual property, *Technology Policy* contains only three sentences of general type like “that users may not violate any copyright, patent or other intellectual property law, including restricted software laws”. Again, the recommendation of the 2021 Accreditation Report “Define procedures for the commercialization of ideas developed by staff and students (Intellectual Property Policy)” has not been implemented.

Students' research activities take place primarily as part of the preparation of their thesis, where students demonstrate the practical application of knowledge and skills in a real-world setting.

Compliance level: Substantial compliant

ET recommendations:

1. *Develop and implement a system for supporting the professional development of academic staff, which would ensure compliance with the requirements of their qualifications.*
2. *Engage with ASU to establish a concrete research activity on Cyber Security. The ET recommends establishing a strategy fostering research collaboration with academics from ASU.*
3. *Develop a motivation system for the full time employed academic staff to publish under the name of the College.*

4. *Define procedures for the commercialization of ideas developed by staff and students.*
5. *The ET recommends that the Faculty must adopt a strategy so that all academic staff and researchers meet criteria required by KAA regarding enterprise and research outcome.*
6. *The ET recommends that the Faculty must subscribe to access to IEEE and ACM to access scientific publications.*

2.7. Infrastructure and Resources

The College admits annually 150 students to the study program. A budget plan until the 2025/2026 academic year has been provided to the Experts Team. There are three lecture theatres (two with capacity of approximately 100 students and one with capacity of approximately 200 students). There are three computer rooms with a capacity to accommodate approximately 25 students each. The computer rooms are equipped with desktop PCs. One of the labs is equipped with Arduinos/Raspberry PIs. An increase in the proportion of laboratory work (important for Professional Practice) inevitably requires the deployment of additional computer classrooms.

However, computer labs lack specialised resources to support specialised courses in the area of cyber security. This is important to support activities in the following courses: Advanced Penetration Testing, Mobile Security and Cloud Security. No sufficient information has been provided how Azure (SER states an agreement with Microsoft to use Azure on education activities) has been used to support Cloud security.

It is a challenge for the College to provide high-quality education to such a large number of undergraduate and postgraduate IT students. This is mainly due to the fact that the proportion of exercises (workshops in classroom learning) is very small.

In terms of infrastructure, the College has concrete plans for improvements: 2,1M€ and 2,75M€ are planned in the budget for academic years 2024(2025 and 2025/2025, respectively, of the college to be spent for the construction of a new building. Five new computer labs are planned.: Concerning human resources, the situation is much less favourable. The ET has not provided a concrete and realistic plan of recruiting staff that have a good experience on various topics in Cyber Security.

The study program has no dedicated facilities or budget, the budget is integrated with the general expenses of the College, with the majority of expenses shared among departments. However, the College has the capability to cover the costs incurred through construction of the new building - the total net income during years 2021-2023 was about 6M€.

With the available space resources (lecture rooms and labs) and the number of academic staff, we consider it possible to realize the proposals presented in this report if the current annual

admission of 150 students is maintained. At the same time, we believe that to achieve its ambitions, the College will need to improve both its laboratory facilities and increase the number of teaching staff, even if current enrollment is maintained. Otherwise, lecturers would be so overloaded with teaching that there would be no time for research and development activities and other activities that accompany academic work.

The books on the open access shelves of the library are not well organised; books from different fields are mixed. Most of the books in the area of Cyber Security are outdated. At the same time, students have access to the ASU electronic library, which ensures the possibility of using the necessary study materials. Note that although this assessment covers the last three years (i.e. from 2021), the SER describes the library's acquisitions from 2011-2016, not acquisitions over the last three years.

Compliance level: Substantial compliant

ET recommendations:

1. *Improve the lab infrastructure to support activities related to specialised courses: Advanced Penetration Testing, Mobile Security, Cloud Security, IoT Security.*
2. *At least 2 new labs with appropriate Cyber Security infrastructure must be deployed until the end of next year.*
3. *Increase the number of labs to support activities across all Computer Science fields of study,*
4. *Update the library with books published within the last 5 years.*
5. *Plan for a realistic increase in the number of teaching staff with expertise in Cyber Security and an adequate academic work environment for them.*
6. *When equipping a new building, plan not only for the needs that arise in connection with an increase in enrollment, but also for the needs that arise in connection with an increase in the quality of educational activities (especially the need to increase the proportion of laboratory work).*
7. *Create access opportunities for students with special needs also in existing buildings.*

3. FINAL RECOMMENDATION OF THE ET

The general opinion on the College is mixed – some very positive achievements are accompanied by few weaknesses and shortcomings.

The following must definitely be highlighted as positive:

1. The College has a clear and ambitious vision for the future and a clear strategy for its realization, especially through the Cintana Alliance, which is managed by Arizona State University.
2. The College actively supports students to gain international experience - the total number of students who participated in international student exchange is by far the largest compared to other higher education institutions in Kosovo.
3. According to employers of graduates, the College is the fastest growing higher education institution in Kosovo and is well positioned to become a benchmark for other higher education institutions in terms of cooperation with companies.

The following weaknesses have been identified:

1. Due to the high turnover of academic staff, it is problematic to ensure the sustainability and quality of academic activities - both teaching and research. Academic staff with Professional Qualifications on Cyber Security must be recruited.
2. There is a need to recruit at least three academic staff in the area of cyber security. Existing academic staff must obtain professional certifications in cyber security.
3. Research in the cyber security is practically non-existent in the College, there are no clearly defined research areas in which internationally competitive research groups are created.
4. The extremely general, information-poor and sometimes inadequate SER indicates that the College still has serious deficiencies in terms of quality assurance of some processes.

Compliance level: Substantially compliant

In conclusion, the Expert Team considers that the Cyber Security Professional bachelor study program offered by the Universum International College is Substantially compliant with the standards included in the KAA Accreditation manual.

It is recommended to conditionally accredit the study program for a duration of 3 years with a number of 150 students, subject to the following condition: The KAA must organize a post-accreditation procedure at the end of the 1st year to audit whether ET recommendations have been implemented.

Compliance level: Substantial compliant.

Student quota recommended: Three Years

Expert Team

Member



Peeter Normak

22.04.2024

(Signature)

(Print Name)

(Date)

Member



Anastasios Dagiuklas

22.04.2024

(Signature)

(Print Name)

(Date)

Member



Seifedine Kadry

22.04.2024

(Signature)

(Print Name)

(Date)

Member



Damian Michalik

22.04.2024

(Signature)

(Print Name)

(Date)