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Republika Kosova - Republic of Kosovo



Agjencia e Kosovës për Akreditim
Agencija Kosova za Akreditaciju
Kosovo Accreditation Agency

University of Mitrovica
Faculty of Mechanical Engineering and Computing (FMEC)
Computer Science and Engineering, BSc

REACCREDITATION

REPORT OF THE EXPERT TEAM

Zagreb & Riga, April 2021



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1. INTRODUCTION

1.1. Context

Date of site visit: February 11th 2021

Expert Team (ET) members:

- Prof. Dr. Damir Kalpić
- Mikus Dubickis, Student expert

Coordinators from Kosovo Accreditation Agency (KAA):

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

Sources of information for the Report:

- *1. Accreditation manual*
- *2. KAA Manual Annex 4.4. Template of the External Review Report for programs_09.07.2018*
- *3. Sample of a Final evaluation report*
- *CVs*
- *Publications*
- *Syllabuses*
- *Scholarships*
- *Annexes*
- *KAA Manual Annex 4.4. Template of the External Review Report for programs_09.07.2018*
- *Self-Evaluation report*



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- *Sample Compliance calculation - Banking and Finance BSc.Prishtina Univer...*
- *SVP UMIB Computer Science*
- *Links to FMEC documents of web*
- *Virtual visit and meeting according to 1.2. Site visit schedule*
- *Additional documents and information provided after the visit*

Criteria used for program evaluation:

- *Accreditation manual*
- *Personal experience in evaluations*
- *Personal experiences as university professor / student*



1.2. Site visit schedule

University of Mitrovica February 11th 2021

	Computer Science and Engineering, BSc, (Re-accreditation) Dr. Damir Kalpić Mikus Dubickis, Student expert	Economics Engineering, BSc, (Re-accreditation) Dr. Tauno Otto Asnate Kažoka, Student expert	Production Engineering, BSc, (Re-accreditation) Dr. Tauno Otto Asnate Kažoka, Student expert
09.00-09.40	Meeting with the management of the faculty where the programme is integrated <i>Hakif Zeqiri, Lumnije Thaçi, Ahmet Latifi, Artan Osmani</i>		
09.45-10.45	Meeting with the heads of the study programme <i>Artan Rexhepi Muzafer Shala Faton Merovci</i>	Meeting with the heads of the study programme <i>Lumnije Thaçi Fisnik Osmani Besnik Hajdari</i>	/
10.50-11.50	Break	/	Meeting with the heads of the study programme <i>Ahmet Latifi Avdi Salihu Fitim Zeqiri</i>
11.50-12.30	Lunch break		
12.30-13.20	Meeting with Quality Assurance representatives <i>Muzafer Shala, Berat Ujkani, Artan Osmani</i>		
13.25-14.15	Meeting with teaching staff <i>Arianit Maraj, Halil Sadiku, Besmir Sejdiu, Labinot Kastrati, Arberie Krasniqi, Muhamet Hajrizi, Melihate Shala, Edita Bekteshi, Granit Hajra, Blerina Voca, Shpetim Salihu</i>		
14.20-15.00	Meeting with students <i>Diellza Pllana, Fjolla Krasniqi, Florentina Abazi, Albana Shabanaj, Mentor Dervishi, Rigon Veseli, Albiona Bilalli</i>		



15.05-15.45	Meeting with graduates <i>Arian Mehana, Leutrim Uka, Jeton Korenica, Diellza Haxhimehmeti, Drilon Beqiri, Ardian Tahiri</i>
15.50-16.30	Meeting with employers of graduates <ul style="list-style-type: none">• Mendim Mustafa, Symbolt• Bajram Mustafa, Trepça Sha• Naser Rexha
16.30-16.40	Internal meeting of KAA staff and experts
16.40-16.50	Closing meeting with the management of the faculty and program

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

Faculty of Mechanical Engineering and Computing of University in Mitrovica was established in 2003, but its origin is in High Technical School, formed and financially supported by “Trepça” in 1961. The details about its growth and development can be found in Self-Evaluation report of the FMEC, January 2021, Mitrovica.

2. PROGRAM EVALUATION

2.1. Mission, objectives and administration

The proceedings of the FMEC is in concordance with the vision of the University of Mitrovica “Isa Boletini” to be a leading Higher Education Institution in the region, in education and scientific research and in preparing competitive professionals in Kosovo and the region, to meet the present and future requirements for the scientific and academic needs, serving the economy, and society needs and welfare in a sustainable way, respecting the common civilisation values and expectations.

A table of compliance to standards was copied from the Sample Compliance Calculation, and is presented in the table below, but with modified Compliances corresponding to estimations for the FMEC Study of Computer Science and Engineering, BSc. Before it, a table concerning



the same standards is commented. Finally, a table with the same contents but with numerically expressed evaluations is proposed.

Standard	Comment
<i>Standard 1.1.</i> The study programme mission is in compliance with the overall mission statement of the institution.	
<i>Standard 1.2.</i> Relevant academic and professional advice is considered when defining the intended learning outcomes which are consistent with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.	Regarding the advice of experts from the last accreditation, digitalization is included in two new courses. However, computer aided optimisation of production mix, inventory management, scheduling, supply chain management for manufacturing and other optimisation and decision-making topics do not seem to be present. The experts had not advised that, but it should be considered.
<i>Standard 1.3.</i> The study program has a well-defined overarching didactic and research concept.	Some remarks and suggestions related to courses are expressed in the chapter on Education. In the discussion in further text below there is a more detailed explanation of the resulting binary decision as “NO”.
<i>Standard 1.4.</i> There are formal policies, guidelines and regulations dealing with recurring procedural or academic issues. These are made publicly available to all staff and students.	We could not properly proof the fulfilment of those requirements for not being able to visit the site physically. We had to rely mostly on the Self-Evaluation document and discussions on the virtual meeting.
<i>Standard 1.5.</i> All staff and students comply with the internal regulations relating to ethical conduct in research, teaching, assessment in all academic and administrative activities.	We find certain Standard’s requirements formulated as “available to all staff and students”, “ All staff and students comply...” and “ All policies, regulations...” as somewhat exaggerated and in practice hardly achievable. We would regard as most successful if instead of the required
<i>Standard 1.6.</i> 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.	



	<p>“all”, e.g. 90% would be satisfied in practice. Too harsh reporting requirements may backfire and become a tolerated negligence of nuisance.</p>
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Standard	Compliance*	
	Yes	No
<i>Standard 1.1.</i> The study programme mission is in compliance with the overall mission statement of the institution.	X	
<i>Standard 1.2.</i> Relevant academic and professional advice is considered when defining the intended learning outcomes which are consistent with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.		X
<i>Standard 1.3.</i> The study program has a well-defined overarching didactic and research concept.		X
<i>Standard 1.4.</i> 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	
<i>Standard 1.5.</i> All staff and students comply with the internal regulations relating to ethical conduct in research, teaching, assessment in all academic and administrative activities.	X	
<i>Standard 1.6.</i> 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 levels were defined with 4 discrete possible values:

- Fully compliant
- Substantially compliant
- Partially compliant
- Non-compliant

using the following guidelines, as required by the KAA Accreditation manual:

1.1. fully compliant – all the standards included in a particular general area are met. If the institution exceeds the standards and meets some of the performance indicators,



commendations are appropriate. This recognition provides the institution motivation to pursue even greater levels of excellence in their quality management practices;

1.2. substantially compliant – 70 – 90% of the standards included in a particular general area are met, while the others are not yet in line with stated expectations. Also, there is potential for requirements of the standards not to be satisfied before the next review (examples may include the loss of key faculty members due to retirements, declining student enrolment, or projected reductions in financial or personnel resources, and others);

1.3. partially compliant - 30 – 60% of the standards included in a particular general area are met. Also, the institution lacks the strength of compliance with the standards to ensure that the quality of the institution will not be compromised;

1.4. non-compliant – less than 30% of the standards included in a particular general area are met. The institution does not satisfy the requirements of the standards.

With 4 “YES” and 2 “NO” in the above table measuring the **Mission, objectives and administration** the Compliance level would be $4/6 = 0.67$ or 67%, rounded off to **70%**, implying “**substantially compliant**”.

Allow us to propose a modification of the above table. We find it not appropriate to judge the compliance to standards using binary variables if the standard contains multiple subtopics. A fuzzy logic approach might be more realistic.

Let us take for example the estimation of compliance to request “*Standard 1.3. The study program has a well-defined overarching didactic and research concept.*” Let us mention the answer of a competent person on behalf of the Study, saying that it is satisfying 30% of the didactic aspect and 70% of research. Is the corresponding Compliance then “YES” or NO”, or is it better to put it to be 50%? The question remains what is more important, education or research? We believe that education is more important and therefore we estimate the compliance less to be than 50% expressed in binary variables, as “NO”.

What if the topics from Standard 1.6, requiring to be “reviewed at least once every two years”, were practiced every 3 years instead? It can be stated as “YES” but more precisely it would be satisfied as 0.67!

On the other hand, can it always be true that all the standards/rows in a table have the same importance, or weight? Standard 1.3 could maybe be the most important? We propose the weights ranging from 1 to 5. Any other range, e.g. 1 to 3 can be used instead, what we find as more realistic than presuming them all being equal.



We shall respect the tables format proposed in the received documents, but we feel free to add our version of tables in some of the topics for your consideration whether it has some advantages.

The table can be produced in Excel and inserted by Copy & Paste:

Standard	Weight	Compliance	Weighted compliance	Relative importance
Standard 1.1. The study program mission is in compliance with the overall mission statement of the institution.	4	0,85	3,4	26%
Standard 1.2. Relevant academic and professional advice is considered when defining the intended learning outcomes which are consistent with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.	3	0,4	1,2	9%
Standard 1.3. The study program has a well-defined overarching didactic and research concept.	5	0,4	2	16%
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.	3	0,9	2,7	21%
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.	2	0,9	1,8	14%
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.	2	0,9	1,8	14%
SUM	19		12,90	100%
OVERALL COMPLIANCE			68%	

Compliance level: 68% ≈ 70%, Substantially compliant



ET recommendations:

- We believe that the expressed mission “to meet the present and future requirements for the scientific and academic needs, serving the economy, and society needs and welfare in a sustainable way, respecting the common civilisation values and expectations” is very well formulated.*

Taking into account the concrete environment and conditions, we assume that FMEC has a realistic opportunity to fulfil the desired mission. The combination of studies encompassing mechanical and industrial engineering, economics and computing may lead to exceptional synergy. An industrial giant like Trepça, especially when it fully recovers, is a trove of all kinds of practical problems from these fields, being permanent challenges for the FMEC researchers, students, and employees.
- Introduction of Master studies could be gradually transformed into a multitude of interdisciplinary elective courses, producing several different profiles of professionals, satisfying ever changing requirements on the labour market. It can be expected that under such conditions, some individuals and groups would excel in their research and become recognised in Europe and the world. Numerous MS and PhD theses can be defended aiming at real-world problems from the environment.*
- Engagement of distinguished professionals from industry to teach part-time at FMEC can be beneficial for both sides.*

2.2. Quality management

Considering the information gathered during the evaluation visit as well as the additionally requested information after the visit, expert team tends to agree with the assessment provided by the HEI in the SER of the program: *As part of the activities under the Faculty’s Strategic Plan for quality development, and in compliance with the Quality Unit at UMIB, all of the academic staff members take part in the self-assessment process and cooperate in the reporting and improvement processes within their scope of activity (S. 2.1.).*

Based on the SER, observations during the evaluation visit, and the analysis of the additional documents and information provided after the visit, although improvements have been made recently, the experts’ team believes that the evaluation processes and planning for improvement are integrated into normal planning processes (S. 2.2.). The SER and information gathered during the visit confirm that the quality assurance processes deal with all aspects of

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program planning and delivery, including services and resources provided by other parts of the institution (S. 2.3.).

The experts' team found that survey data starting from the years 2019 and 2020 is being collected from different groups of stakeholders, however, the results published are at the university level and represent data from students (<https://drive.google.com/file/d/1-KQGa8GJSxGQuS3gNP3a4BEJXCmCTWNe/view>) administrative staff, graduates, and academic staff (<https://www.umib.net/wp-content/uploads/2020/02/SUMMARY-REPORT-FROM-ASSESSMENTS.pdf>) (S. 2.6.). Results that represent data from employers also should be published. Together with the results, specific plan for improvement interrelated with the survey results would be very beneficial for both – internal and external stakeholders.

The experts' team believes that the findings from internal and external evaluations are discussed and taken into account for further development of the study program (S. 2.7.). However, in the future, that would be very beneficial to design an improvement plan at the study program level so the implementation of recommendations could be clearly assessed by the HEI staff as well as the external reviewers. The improvement plan should clearly indicate the areas as follows: survey results, investigation of the student workload, academic success, and employment of graduates. The experts' team believes that the reports are provided to program administrators on the delivery of each study course, and these include details if any planned content could not be dealt with and any difficulties found in using planned strategies as well as appropriate adjustments are made in plans for teaching (P.I. 2.2.). However, it is recommended that the relevant evidence is kept.

The HEI is stating in their SER of the program: *The evaluation of the overall quality of the program is developed through the evaluation of its constituent components. Some of these components will be evaluated twice a year, and some yearly* (S. 2.4., 2.8.). However, for transparency and a holistic approach, it would be advisable periodically (annually) to prepare one self-assessment report on the overall quality of the program for consideration within the institution indicating its strengths and weaknesses. In addition, a comprehensive reassessment of the program that is conducted at least once every five years would be advisable. Policies and procedures for conducting this reassessment should be published, program assessment should involve external stakeholders (e.g., experienced people from relevant industries and professions, and experienced faculty from other institutions) (P.I. 2.4.).

The HEI is showing that the quality assurance arrangements for the program are evaluated and improved by redesigning quality instruments and also by improving their approach to the design of SER for the external review (accreditation) (S. 2.9.). From now on, it is recommended to continue to do it regularly and systematically (once a year). Review of quality assurance arrangements should include both internal and external stakeholders, especially students who now are not that involved in the academic affairs as partners (P.I. 2.5.). Appropriate program evaluation mechanisms, including graduates' surveys, are used to provide evidence about the appropriateness of intended learning outcomes and the extent to which they are achieved. However, the questionnaire for Alumni could be improved because this edition



of the questionnaire does not consider the possibility that the graduate could be working in a different job than he or she was being prepared to (P.I. 2.1.).

Students, who are the most important partner for the successful implementation of the studies, are mainly involved in quality assurance only by filling in the assessment questionnaires. Although, as by definition this is a challenge, the University should move towards higher engagement of students in their academic life at the HEI. Overall although not all the required standards are met fully, the experts' team found out that there indeed is continuing improvement in performance – a great understanding of what quality culture is was observed (S. 2.5.).

Standard	Compliance	
	Yes	No
<i>Standard 2.1.</i> All staff participate in self-evaluations and cooperate with reporting and improvement processes in their sphere of activity.	X	
<i>Standard 2.2.</i> Evaluation processes and planning for improvement are integrated into normal planning processes.	X	
<i>Standard 2.3.</i> Quality assurance processes deal with all aspects of program planning and delivery, including services and resources provided by other parts of the institution.	X	
<i>Standard 2.4.</i> 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	
<i>Standard 2.5.</i> Quality assurance processes ensure both that required standards are met and that there is continuing improvement in performance.	X	
<i>Standard 2.6.</i> Survey data is being collected from students, graduates and employers; the results of these evaluations are made publicly available.	X	
<i>Standard 2.7.</i> 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	
<i>Standard 2.8.</i> The institution ensures that reports on the overall quality of the program are prepared periodically (e.g. every three years) for consideration within the institution indicating its strengths and weaknesses.		X
<i>Standard 2.9.</i> The quality assurance arrangements for the program are themselves regularly evaluated and improved.	X	



Compliance level: 8/9 = 0.888 ≈ 89%, Substantially compliant

ET recommendations:

1. *Design and publish a specific improvement plan interrelated with the survey results (advisable at the study program level - so the implementation of recommendations could be clearly assessed by the HEI staff as well as the external reviewers). The improvement plan should clearly indicate the areas as follows: survey results, investigation of the student workload, academic success, and employment of graduates. Publish also the results that represent survey data from employers.*
2. *Collect the evidence that appropriate adjustments are made in plans for teaching, based on reports on the delivery of each study course.*
3. *Prepare one self-assessment report on the overall quality of the program for consideration within the institution indicating its strengths and weaknesses.*
4. *Conduct a comprehensive reassessment of the program at least once every five years. Policies and procedures for conducting this reassessment should be published, program assessment should involve external stakeholders (e.g., experienced people from relevant industries and professions, and experienced faculty from other institutions).*
5. *Continue to evaluate and improve the quality assurance arrangements regularly and systematically (once a year). Review of quality assurance arrangements should include both internal and external stakeholders, including students.*
6. *Move towards higher engagement of students in their academic life at the HEI.*
7. *Consider improving the questionnaire for Alumni (this edition of the questionnaire does not consider the possibility that the graduate could be working in a different job than he or she was being prepared to).*

2.3. Academic staff

Based on the table in Chapter 3.1. of the Self-Evaluation, one can note a usual problem in developing countries. The newest and the most demanded and best paid professionals in Computing, available for teaching are in scarce supply. It reflects here in the fact that there are no full professors in charge of the CSE study. The situation can be still regarded as favourable. In order to prepare themselves for introduction of Master Study, the Faculty is already employing perspective staff. The situation with staff may deteriorate with time, especially when Kosovo joins the EU. The brain-drain will be difficult to control. There is no simple cure for all in this regard. Better financial stimuli for the staff can be hardly expected from the not



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too rich government. However, a possibility (applied some time ago by one of the here engaged experts) is to take advantage of the allowed and stimulating Faculty policy to engage in non-trivial projects for local needs.

While some tasks offered on the job market are specialised and non-trivial, Faculty is usually not a competition to local IT companies. IT companies prefer to offer completion of repetitive tasks and make more profit due to economy of scale. Engagement in specific highly specialised and complex projects is usually not attractive to them. They fear to invest a lot of effort, time and money and sell the solution only once.

Quite on the contrary, routine professional tasks are not attractive to academic staff, regardless of possible good earnings. They can learn very little or nothing on such tasks and must dedicate additional time for their professional advancements by looking for topics for research to satisfy the request for publishing scientific and professional papers. A source of frustration is often the lack of interest in the environment for the achieved results and solutions. Therefore, the only result of such unrequested research is a published paper. So, the research was performed primarily to write a paper.

Had the research been conducted to address an acute local professional and scientific problem in real life, additional value would have been achieved for the local community, the researcher and his/her team would have earned some money what can help in further advancement of the team, rise members' satisfaction, and increase respect in the local community. Scientific or professional papers (in the technical field the difference is questionable) can cover case studies from real-life, which are accepted also in some respectable journals. So, the research was performed to find a useful, in practice accepted and remunerated solution, while publishing is a by-product of this activity.

Engagement of the Faculty staff is not a loss of time or diversion from their basic tasks. It can be an additional attractive motivation to follow the market demand, acquire the relevant applicable knowledge and disseminate it among the students. The work force market might appreciate that and the demand for your students can further grow. On the other hand, the financial situation of the Faculty staff can significantly improve and so their level of satisfaction and self-fulfilment.

It is important that the education must keep its position as the primary concern. The Faculty should participate in income through the projects signed on behalf of some of its staffers. The Faculty has the right to participate in sharing of the income, but it would be advisable not to overpass 20% (10% Faculty + 10% Department). The rest should be at disposition of those

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who earned it, of course respecting all the local legal obligations. For the departmental funds, the department staff can buy equipment, literature, pay conference fees and travelling expenses. If the departmental work force is insufficient, additional young professionals can be hired from the alumni and paid from the projects. They will surely be the best available and there should be no worry that nepotism might arise, if people decide regarding their own earned money. When the government funds allow, the best of these from project-financed researchers can become regular teaching staff. Following these guidelines, a member of this Expert team, together with his colleagues, managed to establish a new department on their Faculty 16 years ago, without having to ask for any support from the corresponding ministry or University. The new department has never lacked students and their alumni have always been in high demand. Another useful hint if the local legislation allows, would be to honour the financial contributions to the Faculty and the Department for academic promotion, in addition to the standard honouring of publications. Excessive importance given to scientometry is allegedly an objective measure, but it can be sometimes regarded as an exercise in futility. If the staff is forced to publish much, they might choose some rather irrelevant field where the competition is minor. Most often they must even pay fees for their papers to be published. A university teacher must show the ability to publish something internationally, but there is no use of overdoing it. Due to our history and environment, many of us still cannot aspire to become the world-class scientific elite, if working in home country, but still we can be more useful to our societies than some of our famous expatriates.

Scientometric indices are still mostly accepted worldwide as an alleged objective measure of academic excellence. However, in the world is gaining support the opinion which is critical to this prevalence of scientometry. In the Declaration on Research Assessment (DORA), <https://sfdora.org/> , accessed in December 2019, it is written:

“... Our recommendations therefore focus primarily on practices relating to research articles published in peer-reviewed journals but can and should be extended by recognizing additional products, such as datasets, as important research outputs. These recommendations are aimed at funding agencies, academic institutions, journals, organizations that supply metrics, and individual researchers.

A number of themes run through these recommendations:

-- the need to eliminate the use of journal-based metrics, such as Journal Impact Factors, in funding, appointment, and promotion considerations;

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-- the need to assess research on its own merits rather than on the basis of the journal in which the research is published; and

-- the need to capitalize on the opportunities provided by online publication (such as relaxing unnecessary limits on the number of words, figures, and references in articles, and exploring new indicators of significance and impact).”

Allow us a citation from:

Measuring research 'impact' for academic promotion: issues from the literature

<https://pdfs.semanticscholar.org/8a6d/fff952e13a2802b105492c1f6466c966687f.pdf>

(accessed on November 6th, 2018):

“The practice of restricting the assessment and evaluation of academic performance to bibliometric indicators alone, so as to produce a supposedly objective measurement of the quality of an institution, a scholar, a journal or an article, is **flawed** and potentially **damaging** for the equity of academic reward and evaluation.”

Today, many scientists and university teachers are forced to publish at any cost, which is not easy in less developed environments, so they go, often permanently and in full force, to developed environments and thus further help their development. The colonial mentality seems to be somewhere and sometimes praised and celebrated precisely because they helped the development of some other areas, not their homeland. Honour to the exceptions for whom the above does not apply, but they are too few to fill the necessary jobs in higher education institutions in a developing country.

Standard	Compliance	
	Yes	No
<i>Standard 3.1.</i> 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	
<i>Standard 3.2.</i> The teaching staff must comply with the legal requirements concerning the occupation of teaching positions included in the Administrative instruction on Accreditation.	X	
<i>Standard 3.3.</i> 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



<i>Standard 3.4.</i> 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	
<i>Standard 3.5.</i> 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	
<i>Standard 3.6.</i> Opportunities are provided for additional professional development of teaching staff, with special assistance given to any who are facing difficulties.		X
<i>Standard 3.7.</i> 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	
<i>Standard 3.8.</i> 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
<i>Standard 3.9.</i> Strategies for quality enhancement include improving the teaching strategies and quality of learning materials.	X	
<i>Standard 3.10.</i> 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: 7/10 = 70%, Substantially compliant

Standard	Weight	Compliance	Weighted compliance	Relative importance
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.	4	0,90	3,60	15,25%
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.	5	0,80	4,00	16,95%



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.	3	0,40	1,20	5,08%
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.	4	0,80	3,20	13,56%
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.	3	0,70	2,10	8,90%
Standard 3.6. Opportunities are provided for additional professional development of teaching staff, with special assistance given to any who are facing difficulties.	2	0,40	0,80	3,39%
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.	3	0,90	2,70	11,44%
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.	3	0,30	0,90	3,81%
Standard 3.9. Strategies for quality enhancement include improving the teaching strategies and quality of learning materials.	3	0,80	2,40	10,17%
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.	3	0,90	2,70	11,44%
SUM	33		23,60	100,00%
OVERALL COMPLIANCE			72%	

Compliance level: 72%, Substantially compliant

ET recommendations:

- 1. Enforce scientific and professional co-operation with local industry, economy and other appreciated institutions and organisations.*



2. *Support the Faculty staff initiatives to solve local challenging real-life problems and publish their achievements in relevant journals*
3. *Occasionally engage distinguished professionals from industry to provide invited lectures for the students and/or to be co-mentors for students' theses dealing with real-life problems from practice.*

2.4. Educational process content

Based on the textual course descriptions, a table has been produced with comments and suggestions regarding certain courses.

Course	Comments/suggestions
103-CSE Fundamentals of Computer Science	Very ambitious, seems hardly feasible to be fully completed, or maybe too encyclopaedic and narrative? Nearly each of few weeks' topics would require a corresponding full course. It can be questioned whether the course has its purpose, considering that respective courses do exist in the later curriculum. However, it might be a good introduction.
106 -CSE_GERMAN LANGUAGE I	The content of the syllabus of this course is well conceived, but it is questionable whether it can serve as a beginning course, while expecting to fulfil a practically unreachable goal declared as "... also write short texts, while not making any mistakes." At least, it should be modified to "...but also write short texts, while not making too many mistakes." For students who have learned German in their secondary schools, the course could be appropriate to refresh and systematise their already acquired knowledge. German is not a simple language even for students with linguistic gifts. It should be extended at least in two elective courses and inform the students whether some previous knowledge of German is expected.
111-CSE_CAD-i_	Weekly schedule is missing.
201-CSE_Computing II	Declared Accessibility #5: "Apply basic searching and sorting algorithms in software design." Neither in the Content nor in the Weekly programme any sorting algorithms are mentioned. The students will most probably use in practice sorting routines from libraries, but sorting algorithms are important as paradigms, illustrating effectiveness and efficiency, divide & conquer method, using of data structures, using of recursion etc. It is one of the most important courses, but probably also very complex and comprehensive, so that it may be difficult for students to master it within a single one-semester course and, regardless on the weekly load and excellent lecturer, within a real time of half a year.



<p>203-CSE_Computer Architecture and Organization</p>	<p>The weeks listed below might be partly recycling the topics from 104-CSE_Computer Circuits weekly programme: Numerical systems and data representation, Binary, octal and hexadecimal arithmetic, Boolean algebra and logical gates. These weeks are: Tenth week: Number systems, decimal, hexadecimal, converting from one number system to another Twelfth week: Computer arithmetic, Logic Arithmetic unit, representing integer values, representing Floating-point Thirteenth week: Digital logic; Boolean logic, combination circuits, programmable equipment, etc.</p> <p>However, in neither of the courses, 104-CSE nor 203-CSE, numerical precision and accuracy are treated. They are treated in 213-CSE_MEASUREMENTS AND DAS, but seemingly from the standpoint of measurements, not by the numbers' representation in computer.</p>
<p>205-CSE_Database Systems</p>	<p>Topics potentially overlapping with course 303-CE: Structure of Relational Databases, The Relational Algebra, Overview of the SQL Query Language, Database Design Using E-R Model, Extended E-R Features</p>
<p>303-CSE_Database Management</p>	<p>Topics potentially overlapping with course 205-CE: The Relational Model and Languages, Relational Algebra, SQL: Data Manipulation, Database Design Using E-R Model, Extended E-R Features</p>
<p>306-CSE Accounting in IT and ERP _English_2020_2021</p>	<p>Usually in university syllabuses commercial names are avoided. There is no need to change anything, except using the term Selected ERP (in further text SERP) instead of SAP.</p>
<p>312-CSE_Computer Modelling and Simulation</p>	<p>Consider proposing a more appropriate course name better corresponding to the course contents, e.g. Computer simulation and analysis of electric circuits.</p>
<p>Introduction of a course Seminar - is suggested</p>	<p>Students should prepare, write, and orally present to their colleagues some selected topic from the curriculum, extended due to student's individual research and additional readings. The evaluation should be anonymous by the students who attended a series of presentations, where none of them can assign a same number of points to two different presentations.</p> <p>It would be an extension and practical exercise in lessons learned in the course 110-CSE_Communication skills, which are rather important for technically minded students to master.</p>
<p>212_CSE_Statistics</p>	<p>Excellent programme! If it can be so well performed as described, it would be a pity not to make it obligatory. Understanding of</p>



	Statistics is currently in high demand and widely applicable, from Quality control, to Artificial intelligence, Big data and further.
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Standard	Compliance	
	Yes	No
<i>Standard 4.1.</i> 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
<i>Standard 4.2.</i> The study program complies with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. The individual components of the program are combined in a way to best achieve the specified qualification objectives and provide for adequate forms of teaching and learning.	X	
<i>Standard 4.3.</i> 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	
<i>Standard 4.4.</i> 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	
<i>Standard 4.5.</i> 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
<i>Standard 4.6.</i> The student-teacher relationship is a partnership in which each assumes the responsibility of reaching the learning outcomes. Learning outcomes are explained and discussed with students from the perspective of their relevance to the students' development.	X	
<i>Standard 4.7.</i> Teaching strategies are fit for the different types of learning outcomes programs are intended to develop. Strategies of teaching and		X



assessment set out in program and course specifications are followed with flexibility to meet the needs of different groups of students.		
<i>Standard 4.8.</i> 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	
<i>Standard 4.9.</i> 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	
<i>Standard 4.10.</i> Policies and procedures include actions to be taken in to dealing with situations where standards of student achievement are inadequate or KAA inconsistently assessed.		X
<i>Standard 4.11.</i> 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	
<i>Standard 4.12.</i> 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	

Compliance = 8/12 = 67% ≈ 70%, Substantially compliant



Standard	Weight	Compliance	Weighted compliance	Relative importance
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.	2	0,4	0,8	3,01%
Standard 4.2. The study program complies with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. The individual components of the program are combined in a way to best achieve the specified qualification objectives and provide for adequate forms of teaching and learning.	4	0,8	3,2	12,03%
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.	5	0,9	4,5	16,92%
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.	5	0,9	4,5	16,92%



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.	2	0,3	0,6	2,26%
Standard 4.6. The student-teacher relationship is a partnership in which each assumes the responsibility of reaching the learning outcomes. Learning outcomes are explained and discussed with students from the perspective of their relevance to the students' development.	3	0,7	2,1	7,89%
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.	3	0,2	0,6	2,26%
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.	4	0,8	3,2	12,03%
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.	3	0,6	1,8	6,77%
Standard 4.10. Policies and procedures include actions to be taken in to dealing with situations where standards of student achievement are inadequate or KAA inconsistently assessed.	1	0,2	0,2	0,75%



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.	3	0,8	2,4	9,02%
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.	3	0,9	2,7	10,15%
SUM	38		26,6	100,00%
OVERALL COMPLIANCE	70,00%			

Compliance = 70,00%, Substantially compliant

ET recommendations:

- 1. Recommendations regarding single courses are contained in the first table in this chapter on Education.*
- 2. Ever rising need for new courses is not followed by equal desire to remove certain courses. Offering more elective courses can help to decide which courses are in demand and should remain.*
- 3. When rising to MS degree, try to combine suitable attractive courses from all your three studies in order to establish and offer to students some interdisciplinary component. For that purpose, a system of prerequisites should be prescribed to assure that students have the necessary knowledge to be able to follow the enrolled courses.*

2.5. Students

There is a clear and formally adopted admission procedure at the institutional level that the study program respects when organizing students' recruitment. The experts' team did not find any evidence that admission requirements would not be consistently and fairly applied for all students (S. 5.1.). All students enrolled in the study program possess a high school

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graduation diploma or other equivalent document of study, according to MEST requirements (S. 5.2.).

Considering the information gathered during the evaluation visit, the experts' team believes that:

- the study groups are dimensioned to ensure an effective and interactive teaching and learning process (S. 5.3.). The academic staff that participated in the evaluation visit demonstrated a good understanding of student-centred learning.
- feedback to students on their performance and results of assessments is given promptly and accompanied by mechanisms for assistance if needed (S. 5.4.).
- flexible treatment of students in special situations is ensured with respect to deadlines and formal requirements in the program and to all examinations (S. 5.6.).
- academic staff is available at sufficient scheduled times for consultation and advice to students. Adequate tutorial assistance is provided to ensure understanding and ability to apply learning (S. 5.11.).

The results obtained by the students throughout the study cycles are certified by the academic record (the examples were provided after the visit) (S. 5.5.). Effective procedures (Turnitin plagiarism detection software) are being used to ensure that work submitted by students is original (S 5.8.).

The experts' team found that the records of student completion rates are kept for all study courses but did not find the evidence that the records are kept for the program as a whole and did not find that this aspect would be included among quality indicators (S. 5.7.). The strategic plan of the FMEC does not contain any KPIs.

Students' rights and obligations are made publicly available (Handbook for students and Regulation on Student Responsibility and Disciplinary Procedure) and include the right to academic appeals. *Considering the information gathered during the evaluation visit, the experts' team believes that the rights and obligations are promoted to all those concerned and enforced equitably (S. 5.9.).* The students' transfer between higher education institutions, faculties, and study programs is regulated by the "Decision of the Senate for transfer" and Statute of HEI. Students were aware of the transfer option (S. 5.10.). Rules for short-term mobilities are defined in the regulation on internationalization and mobility (<https://www.umib.net/wp-content/uploads/2020/02/REGULATION-ON-INTERNATIONALIZATION-AND-MOBILITY.pdf>), however, recognition rules for foreign qualifications as well as qualifications obtained outside higher education institutions (informal education, experience etc.) are not defined (P.I. 5.1.). Both students and HEI would benefit from designing these rules.

Considering the information gathered during the evaluation visit, the experts' team cannot confirm that there are systems (institutional mechanisms) established for monitoring and coordinating student workload across courses as well as for monitoring year-to-year



progression rates and program completion rates (P.I. 5.2.). However, it would be beneficial for both – HEI and students to establish these procedures.

Arrangements are made within the institution for the training of teaching staff in the theory and practice of student assessment (there is evidence for the year 2020). However, grading of students' tests, assignments, and projects is not assisted using matrices or other means to ensure that the planned range of domains of student learning outcomes is addressed (P.I. 5.3.). It would be beneficial to explain in more detail the criteria used to evaluate the tasks performed by students (e.g., by using matrices or other means to ensure that the planned range of domains of student learning outcomes is addressed (see more: *Constructive Alignment* by Biggs, 1999, 2003)).

During the visit, the expert team was assured that support services are provided on an appropriate level, except the career guidance – according to the students' opinion, it could be more developed (P.I. 5.4.). At the same time, given the P.I. 5.4., it is recommended to supplement/clarify the questionnaire on *STUDENTS EVALUATION ON SUPPORT SERVICES* with the following aspects:

- 1) student counselling in case of emotional problems,
- 2) student counselling in case of financial problems,
- 3) student counselling in case of family-related problems,
- 4) student counselling in international matters,
- 5) legal advice,
- 6) interdisciplinary guidance.

Although there are study courses in which it would be necessary to update the list of compulsory and recommended literature, mostly textbooks and reference materials are up to date and incorporate the latest developments in the field of study. Considering the information on the availability of literature received after the visit (*There are some textbooks available in hardcopy at the library but almost all of the books that are stated in syllabuses are used in electronic versions, even when they are purchased we prefer to purchase them in electronic format*), the experts' team assume that literature is available in sufficient quantities (P.I. 5.5.).

According to the additionally provided information after the visit, the academic or professional fields for which students are being prepared are monitored based on worldwide labour market reports:

- Analytical Report on Trade in Services – ICT Sector
- IT-Barometer-2019
- Kosovo-Country-Report-Findings-from-the-Skills-towards-Employment-and-Productivity-Survey

However, it would be beneficial to do that on a continuing basis with necessary adjustments made in the program and in text and reference materials to ensure continuing relevance and quality (P.I. 5.6.).



Standard	Compliance	
	Yes	No
<i>Standard 5.1.</i> 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	
<i>Standard 5.2.</i> All students enrolled in the study program possess a high school graduation diploma or other equivalent document of study, according to MEST requirements.	X	
<i>Standard 5.3.</i> The study groups are dimensioned so as to ensure an effective and interactive teaching and learning process.	X	
<i>Standard 5.4.</i> Feedback to students on their performance and results of assessments is given promptly and accompanied by mechanisms for assistance if needed.	X	
<i>Standard 5.5.</i> The results obtained by the students throughout the study cycles are certified by the academic record.	X	
<i>Standard 5.6.</i> Flexible treatment of students in special situations is ensured with respect to deadlines and formal requirements in the program and to all examinations.	X	
<i>Standard 5.7.</i> Records of student completion rates are kept for all courses and for the program as a whole and included among quality indicators.		X
<i>Standard 5.8.</i> Effective procedures are being used to ensure that work submitted by students is original.	X	
<i>Standard 5.9.</i> 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	
<i>Standard 5.10.</i> The students' transfer between higher education institutions, faculties and study programs is clearly regulated in formal internal documents.	X	
<i>Standard 5.11.</i> Academic staff is available at sufficient scheduled times for consultation and advice to students. Adequate tutorial assistance is provided to ensure understanding and ability to apply learning.	X	

Compliance level: 10/11 = 0.909 ≈ 91%, Substantially compliant

ET recommendations:



1. *Establish procedures for monitoring year-to-year progression rates and program completion rates. Collect student completion rates at the study program level and include this aspect among quality indicators (e.g., in the strategic plan of the FMEC).*
2. *Design recognition rules for foreign qualifications as well as qualifications obtained outside higher education institutions (informal education, experience, etc.).*
3. *Establish procedures for monitoring and coordinating student workload across courses.*
4. *Explain in more detail the criteria used to evaluate the tasks performed by students (e.g., by using matrices or other means to ensure that the planned range of domains of student learning outcomes is addressed).*
5. *Supplement/clarify the questionnaire on STUDENTS EVALUATION ON SUPPORT SERVICES with the following aspects - student counselling in case of emotional problems, student counselling in case of financial problems, student counselling in case of family-related problems, student counselling in international matters, legal advice, and interdisciplinary guidance.*
6. *Monitor the academic or professional fields for which students are being prepared on a continuing basis with necessary adjustments made in the program and in text and reference materials to ensure continuing relevance and quality.*

2.6. Research

According to the SER of the program, work on the development of scientific/research work is underway, but now the study program has not 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: “According to the strategic plan of the university in the next two years a working group will be formed, a draft of the strategic research plan will be made, research institutes in academic units will be established, the scientific research office will be functional, a fund from financial income for research support will be established and various conferences will be held” (S. 6.1.). While defining scientific/applied research objectives, sufficient financial, logistic, and human resources should be allocated for achieving the proposed research objectives.

Expectations for teaching staff involvement in research and scholarly activities are clearly specified (as a requirement): “For promotion or appointment of candidates to respective academic titles (Full Professor, Associate Professor, Assistant Professor), the minimum requirements of the provisional statute of UMIB must be fulfilled, namely the publication of a certain number of scientific papers in the international journals”. Assessment of research performance is considered in the Dean’s questionnaire (S. 6.2.). In addition, also students’ questionnaires could be supplemented with the relevant questions (assessment of the integration of the research results in the study course).



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 (S. 6.3.). The HEI is also profiling their researchers according to the European Commission research profiles descriptor. The academic staff mainly has a proven track record of research results on the same topics as their teaching activity (S. 6.4.). The academic staff publishes their work, scientific/applied products are presented at conferences, sessions, symposiums, seminars, etc. and contracts, expertise are provided to partners inside the country (S. 6.5.). However, the link with the industry could be strengthened. Research at the HEI is validated through scientific and applied research publications and other structures for validation (S. 6.6.). With a few exceptions, each academic staff member and researcher has produced at least an average of one scientific/applied research publication per year for the past three years (S. 6.7.). However, not all the academic staff publish under the name of the respective HEI (S. 6.8.). Considering the study course descriptions, academic staff are not 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 (S. 6.9.).

The rights of ownership and intellectual property at the HEI are regulated by the law on copyrights, the code of ethics in UMIB, regulation on disciplinary procedures for staff, and regulation on disciplinary procedures for students (S. 6.10.). However, there should be procedures set out for the commercialization of ideas developed by staff and students.

According to the additional information provided by the HEI, students are engaged in research mainly through bachelor thesis, with a few exceptions (S. 6.11.). Mechanisms for students' engagement in applied research projects and other activities should be developed and outputs monitored. Although no special incentive mechanisms are foreseen, considering the information provided by the stakeholders during the visit – assistance and support is given to teaching staff to develop collaborative research arrangements with colleagues in other institutions and in the international community (P.I. 6.1., 6.6.). However, special mechanisms for teaching staff encouragement to develop collaborative research with colleagues in other institutions and in the international community could be developed and outputs monitored. The study program does not organize scientific sessions, symposiums, conferences, round tables, except in 2019 there has been established the Programming Club (P.I. 6.2.). The organization of scientific sessions with the involvement of teaching staff, researchers, students, and graduates should be considered.

Experts team did not find that:

- 1) the support is being provided for junior teaching staff in the development of their research programs through mechanisms such as mentoring by senior colleagues, inclusion in project teams, assistance in developing research proposals, and seed funding (P.I. 6.3.),
- 2) strategies are introduced for identifying and capitalizing on the expertise of teaching staff and students in providing research and development services to the community (P.I. 6.4.),
- 3) the HEI is monitoring and supporting staff's contribution to attracting financial resources through research/applied/artistic projects and products (P.I. 6.5.),



4) the staff capacity to generate such financial returns would be considered in the individual performance review system (P.I. 6.5.).

Standard	Compliance	
	Yes	No
<i>Standard 6.1.</i> 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
<i>Standard 6.2.</i> 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	
<i>Standard 6.3.</i> 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	
<i>Standard 6.4.</i> The academic staff has a proven track record of research results on the same topics as their teaching activity.	X	
<i>Standard 6.5.</i> 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	
<i>Standard 6.6.</i> Research is validated through: scientific and applied research publications, artistic products, technological transfer through consultancy centres, scientific parks and other structures for validation.	X	
<i>Standard 6.7.</i> 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	
<i>Standard 6.8.</i> Academic and research staff publish under the name of the institution in Kosovo they are affiliated to as full time staff.		X
<i>Standard 6.9/6.8.</i> 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
<i>Standard 6.10.</i> Policies are established for ownership of intellectual property and clear procedures set out for commercialization of ideas developed by staff and students.		X
<i>Standard 6.11.</i> Students are engaged in research projects and other activities.		X



Compliance level: $5/11 = 0.454 \approx 45\%$, Partially compliant

ET recommendations:

1. *Define 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 should be allocated for achieving the proposed research objectives.*
2. *Consider supplementing students' questionnaires with the question for assessment of the integration of the academic staff research results in the study course.*
3. *Consider strengthening the link with the industry.*
4. *Make sure that all the academic staff publishes under the name of the UMIB.*
5. *Encourage academic staff to include in their teaching information about their research and scholarly activities that are relevant to the study courses they teach, together with other significant research developments in the field.*
6. *Define procedures for the commercialization of ideas developed by staff and students (Intellectual Property Policy).*
7. *Develop mechanisms for students' engagement in applied research projects and other activities, monitor the outputs, outcomes, and impact.*
8. *Consider designing and implement special mechanisms for teaching staff encouragement to develop collaborative research with colleagues in other institutions and in the international community as well as to monitor the outputs, outcomes, and impact.*
9. *Consider the organization of scientific sessions with the involvement of teaching staff, researchers, students, and graduates.*
10. *Consider providing support for junior teaching staff in the development of their research programs through mechanisms such as mentoring by senior colleagues, inclusion in project teams, assistance in developing research proposals, and seed funding.*
11. *Consider introducing strategies for identifying and capitalizing on the expertise of teaching staff and students in providing research and development services to the community.*
12. *Consider monitoring and supporting staff's contribution to attracting financial resources through research/applied/artistic projects and products. Consider including*



the staff's capacity to generate such financial returns in the individual performance review system.

2.7. Infrastructure and resources

Unfortunately, we could not observe the Faculty premises in situ, but according to multiple sources they seem to be excellent. Ownership is obvious and does not have to be proved. Having in mind intrinsic economic instabilities and unexpected problems on the global level, like the current COVID-19 pandemic, nobody can guarantee the Standard's requirement to know what might happen in three years from now. We suppose that the requests in 7.5. cannot be satisfied to each detail. Literature in domestic language, access to some databases and some software licences usually are lacking.

Standard	Compliance	
	Yes	No
<i>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.</i>	X	
<i>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.</i>		X
<i>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.</i>	X	



<p><i>Standard 7.4.</i> 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.</p>	<p>X</p>	
<p><i>Standard 7.5.</i> The education institution's libraries must ensure, for each of the study programs:</p> <p>a) a number of seats in the reading rooms corresponding to at least 10% of the total number of students in the study program;</p> <p>b) a number of seats in the group work rooms corresponding to at least 10% of the total number of students in the study program;</p> <p>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;</p> <p>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;</p> <p>e) a sufficient number of subscriptions to Albanian and foreign publications and periodicals, according to the stated mission.</p>		<p>X</p>
<p><i>Standard 7.6.</i> The infrastructure and facilities dedicated to the implementation of the program is adapted to students with special needs.</p>	<p>X</p>	

Compliance = 4/6 = 67% ≈ 70%, Substantially compliant



Standard	Weight	Compliance	Weighted compliance	Relative importance
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.	5	0,8	4	26%
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.	3	0,5	1,5	10%
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.	4	1	4	26%
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.	3	1	3	20%



Standard 7.5. The education institution's libraries must ensure, for each of the study programs: a) a number of seats in the reading rooms corresponding to at least 10% of the total number of students in the study program; b) a number of seats in the group work rooms corresponding to at least 10% of the total number of students in the study program; c) their own book stock from Albanian and foreign specialty literature, enough to cover the disciplines within the curricula, out of which at least 50% should represent book titles or specialty courses of recognized 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.	3	0,3	0,9	6%
Standard 7.6. The infrastructure and facilities dedicated to the implementation of the programme is adapted to students with special needs.	2	0,9	1,8	12%
SUM	20		15,20	100%
OVERALL COMPLIANCE	76%			

Compliance = 76% = Substantially compliant

ET recommendations:

1. *Provide sport facilities for your students. They are allegedly missing, but represent an important resource for young people, for their health and quality of social life.*
2. *Missing literature in Albanian should not be regarded as a serious problem. It can happen that while a textbook is being translated, it becomes obsolete. Nowadays, practically every professional in Computing must be fluent in English and able to work in international environment. If necessary, provide additional courses in English.*
3. *Try to attract foreign students by holding some lectures in English. Some of your students would probably eagerly attend lectures in English. However, mother tongue should never be neglected, regardless of seemingly rational advantages of using only English.*



3. OVERALL EVALUATION AND RECOMMENDATION OF THE ET

Due to the COVID-19 pandemic we could not be physically present at the Faculty and we had to rely more on written materials and meetings via video link.

We gave same recommendations in each of the chapters. Our impression is globally positive. If you continue keeping the motivation high and by attracting the best student population and by promoting co-operation with local industry but also with institutions and companies abroad, using possibility to work on-line, the study has favourable perspective.

International co-operation, schooling and working abroad are very useful and usually attractive so that our most important recommendation would be to motivate your quality staff and students to plan return to their homeland, making it every day more prosperous.

Overall compliance:

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

According to the KAA Accreditation manual, in order to be granted a positive decision for program re/accreditation, every education provider has to demonstrate at least a **substantial compliance** level in the overall judgment. Therefore, failure in meeting at least an overall substantial compliance level entails delaying, withdrawing, suspending or denying accreditation.

In conclusion, in line with the Manual requirements, the Expert Team recommends **to accredit** the program.



Republika e Kosovës
Republika Kosova - Republic of Kosovo



Agjencia e Kosovës për Akreditim
Agencija Kosova za Akreditaciju
Kosovo Accreditation Agency

In conclusion, the Expert Team considers that the study programme **Computer Science and Engineering, BSc**, offered by **University of Mitrovica, Faculty of Mechanical Engineering and Computing** is *Substantially compliant*, with the standards included in the *KAA Accreditation manual* and, therefore, recommends to *accredit* the study program for a duration of **5 years** with a number of **160** students to be enrolled in the program.

4. APPENDICES (*if available*)

1. A
2. B
3. C

Expert Team

Chair

2 April 2021

(Signature)

Professor emeritus Damir Kalpić, PhD

(Date)

Member

2 April 2021

(Signature)

Mr. Mikus Dubickis

(Date)