

## Republika e Kosovës

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



# UNIVERSITY OF PRISHTINA "HASAN PRISHTINA" FACULTY OF MATHEMATICAL AND NATURAL SCIENCES

STUDY PROGRAM: Materials Science, MSc, 120 ECTS (Accreditation)

## REPORT OF THE EXPERT TEAM



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## 1. INTRODUCTION

## 1.1. Context

**Date of site visit: 27.02.2024** 

## **Expert Team (ET) members:**

- Prof. Andriana Surleva, PhD
- Prof. Bruno Zelić, PhD
- Juraj Bogat

## Coordinators from Kosovo Accreditation Agency (KAA):

• Leona Kovaçi, KAA Officer

## **Sources of information for the Report:**

- KAA Accreditation Manual (2022)
- KAA Manual for external evaluation of higher education institutions (2021)
- KAA Manual Annex 4.4. Template of the External Review Report
- Compliance calculation template
- Self-evaluation report (SER) of MSc Organic Chemistry (2023)
- *University web page*
- Course Syllabuses
- Teaching staff CVs
- Additional documents

## **Requested Documents**

- 1. Table according the standard 2.3.1 (including workload for teaching, exams, consulting, administrative activities, research, etc. for the study program under evaluation).
- 2. List of available books for the program, including open access, databases links, etc.
- 3. Public report of evaluation of teaching staff and links (to prove it is publicly available).
- 4. Internal reports/recommendations from QA coordinators to program authors.

#### **Received documents**

- 1. Tables according the standard 2.3.1 (including workload for teaching, exams, consulting, administrative activities, research, etc. for the study program under evaluation) for MSc Materials Science
- 2. List of available books for the study programs, including open access, databases links, etc. the presented list is not informative. The titles of the books are not presented.

- 3. Public report of evaluation of teaching staff and links (to prove it is publicly available). The provided links connect to the Center for Teaching Excellence. Any direct connection to public reports. A copy of a SEMS report of evaluation of the academic staff is provided.
- 4. Internal reports/recommendations from QA coordinators to program authors.

## Criteria used for institutional and program evaluations

The experts team followed the program accreditation assessment areas and respective performance indicators, developed by Kosovo Accreditation Agency that are presented in Accreditation Manual – 2022.

## 1.2. Site visit schedule

Time	Meeting	Participants
09:00 – 09:50	Meeting with the management of the faculty where the programme is integrated	
09:50 – 10.35	Meeting with quality assurance representatives and administrative staff	
10:35 – 10:45	Short break	
10:45 – 11:45	Meeting with the heads of the study programme: Food Chemistry, BSc 180 ECTS, Prof. Bruno Zelic	
10:45 – 11:45	Meeting with the heads of the study programme: Material Science, MSc 120 ECTS, Prof. Andriana Surleva	
11:45 – 12:45	Lunch break (provided at the evaluation site)	
12:45 – 13.45	Meeting with teaching staff	
13:45 – 14:30	Visiting Facilities	
14:30 – 14:40	Short break	
14:40 – 15:30	Meeting with employers of graduates and external stakeholders	
15:30 – 15:35	Internal meeting of KAA staff and experts	
15:35 – 15:45	Closing meeting with the management of the faculty and program	

## 1.3. A brief overview of the institution under evaluation

Insert general information about the institution, its legal status, is mission, the study programs it is offering, and others.

The Faculty of Mathematical and Natural Sciences (FMNS) at the University of Prishtina "Hasan Prishtina" (UP) was established in 1971, by the decision of the Assembly of Kosovo (Official Gazette Republic of Kosovo no. 37/71). The studies of natural sciences and mathematics (chemistry, biology, physics and mathematics) began eleven years earlier within the Faculty of Philosophy, founded in 1960. FMNS organizes higher education (HE) studies in five departments: chemistry, biology, physics, geography and mathematics. Several bachelors, master and PhD programs are currently offered. Having European study standards as its objective of achievement and aims for better cooperation with European universities, the model of studies according to the Bologna agreement (3+2+3) was initiated in the academic year 2001/2002.

FMNS, in accordance with the Statute of UP, for each academic year determines the criteria for the admission of new students. The number of students is proposed by the academic unit, namely the relevant department based on the human and material resources it possesses and is approved by the Council of FMNS followed by the UP Senate. Currently, in all the study programs that are offered at the three levels of study at FMNS, the number of new students has been completed according to the plans.

Teaching at FMNS is organized regularly (with a full schedule) and includes a multitude of planned activities to achieve the objectives of the subjects and the program. These activities include lectures, laboratory, theoretical and practical exercises, seminars, scientific research, student mentoring, etc. All teachers at FMNS have high academic and scientific qualifications adequate for the courses they teach. Teaching methodologies are different, depending on the nature of the subject being taught. Within UP there is a Centre for Excellence in Teaching which offers regular training and other resources to increase the effectiveness of classroom teaching and stimulate learning. Every year, UP organizes the evaluation of teachers by students, the purpose of which is to continuously improve the quality of teaching. In the Department of Chemistry, each study program ends with a diploma thesis. The departments of Chemistry at FMNS offers the following programs: BSc Chemistry, BSc Engineering Chemistry, MSc Organic Chemistry, MSc Analytical and Environmental Chemistry, MSc Physical and inorganic chemistry, and PhD in Chemistry.

The students are actively involved in the learning process through activities that are organized in order to achieve the expected results and their professional development. At the beginning of each course, teachers are obliged to present to students teaching/learning program (syllabuses) which include all the activities planned by the teacher that help students acquire the content of the subject/course in order to develop knowledge, skills and abilities defined for

the given course. Attendance of lectures and exercises is mandatory and is recorded regularly (through the electronic system). In addition to classroom activities, students also have individual and group work in the form of projects or homework. The achievements and progress of students for each course are permanently evaluated through the intermediate and final evaluation. The evaluation criteria and deadlines are determined by the Statute of UP and by regulations of FMNS.

The Master's study program in Materials Science offers specialized courses and training to prepare students to be challenged with many specific problems in the field. The program is organised in two years of study for 120 ECTS; 60 ECTS per year (25 h per ECTS). The Materials Science Master study program is newly developed based on demands of modern society in Kosovo and abroad. This is the initial accreditation of the program.

## 2. PROGRAM EVALUATION

The institutional evaluation consists of 7 subheadings through which the administration, organisation and management of the institution, as well as teaching and research are assessed.

## 2.1. Mission, Objectives and Administration

Standard 1.1. The study program mission is in compliance with the overall mission statement of the institution.

The mission of the Master's study program Materials Science is to provide students with the knowledge, skills and interdisciplinary approach required to carry out various activities in the field of design, production, testing and sustainable use of materials The program is fully in line with the mission of the FMNS and the UP, which states that "The University shall be an autonomous public institution of higher education, engaged in academic education, scientific research, artistic work, professional consultancy, as well as in other fields of academic activity." (Article 6 of the UP Statute).

The objectives of the Master's study program "Materials Science" are: (i) to prepare students with the necessary skills for the selection of different problems belonging to the field of materials science using creative ideas in accordance with contemporary standards and good practices; (ii) to prepare students to contribute to sustainable development; to communicate, discuss and present scientific findings in society and interacting with stakeholders; (iii) to prepare students for the next cycle of studies (PhD); and (iv) to advance the position of materials science in the national and international labour market. The above objectives are fully aligned with the UP objectives described in the Strategy of the University of Prishtina - Strategic Plan 2023 - 2025 and the UP Statute, where the strategic goals are (i) increasing the quality of teaching and learning; (ii) advancement of science, innovation and better connection with the labour market; (iii) improving the position and role of UP on the international scene;

(iv) the advancement of infrastructure and the use of digital technology; and (v) strengthening governance, integrity and funding.

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.

The intended learning outcomes of the Master's study program Materials Science are in line with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. There are several ways to provide relevant academic and professional guidance in defining the intended learning outcomes, which can be divided into institutional and those based on self-assessment of the implementation of the teaching process by the teaching staff and discussions at FMNS level in the Study Program Committee and the Faculty Council. Institutional support in defining the intended learning outcomes is provided by the UP Centre for Excellence in Teaching (UPCET). UPCET, for example, organizes and conducts activities that ensure the further development of skills and competencies of academic staff at UP and other higher education institutions; promotes the creation of a culture of academic excellence through the implementation of standards and best practices in teaching; provides services to UP and other higher education institutions in the area of teaching excellence (curriculum development, creation of teaching materials, student engagement and continuous assessment, application of hybrid classes in teaching, learning on electronic platforms, etc.); supporting faculty and academic staff in the implementation of innovative and best practices in teaching, mentoring and assessment of students; and promoting and providing services for the implementation of ethical standards in teaching.

Standard 1.3. The study program has a well-defined overarching didactic and research concept.

The study program lasts two years and is divided into four semesters, for each of which 30 ECTS credits are credited, so that a total of 120 ECTS credits are earned on completion of the study. The study program ends with the defence of the master's thesis and is fully aligned with the recommendations of the Bologna system. Various teaching methods are used to implement the study program, such as lectures, group work, (calculation) seminars, laboratory work and project-based teaching. The teaching methods are described in the curricula of the individual study courses. In addition to group work, special attention is paid to individual work with students, which is particularly evident in the preparation of the master's thesis and the preparation for various forms of knowledge tests. In this way, students are prepared to present their knowledge, skills and competencies orally and in writing, both independently and in groups. The teaching staff is supported by UPCET in the organization of teaching and the assessment of students' performance.

According to the experts, the Master's study program in Materials science is based on relevant scientific knowledge from the related field.

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.

The most important document setting out formal policies, guidelines and regulations on recurring procedural or academic issues is the Statute of the University of Pristina (UP Statute). In addition to the UP Statute, there are other important documents that regulate procedural and academic issues at the UP and its academic units, of which the Regulations for Disciplinary Measures at the UP, the Regulations for Academic master's programmes, the Regulations for Quality Assurance, Guidelines for the Evaluation of Subjects by Students, the Regulations for reaccreditation preparation procedures, the Regulation for the academic mobility of students and the Code of Ethics should be highlighted. Different regulations at the faculty level should also be considered. All these documents are publicly accessible to all interested parties via the UP website.

Each faculty has a Studies Committee that serves as an advisory body to the Faculty council. The Faculty Studies Committee is responsible for designing new study programs and for approving and revising existing study programs. The work of the Faculty Studies Committee is governed by the provisions of the UP Statute. The organization of teaching, research, quality assurance and student assessment is the responsibility of the faculty management. The faculty management is also responsible for monitoring the progress of students during their studies. The head of department is responsible for coordinating and monitoring the learning process at departmental level. The Studies Committee at the UP level serves as an advisory body to the Senate of the UP on general issues related to the development of new study programs and their approval, as well as for the revision of existing study programs.

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.

The internal regulations on ethical conduct in research, teaching and assessment in all academic and administrative activities at the UP have been drawn up and are publicly accessible to all interested parties. Ethical issues at the UP are governed by the following documents: Code of Ethics for Academic Staff (Code of Ethics), Code of Actions and Disciplinary Procedures against Academic Staff, Regulation on Disciplinary Actions and Procedures, Regulation on the Establishment and Principles of the Committee for Ethics in Scientific Research, Regulation on Prevention and Protection Against Sexual Harassment and Bullying at the University of Pristina. According to the experts, management, teaching staff, administration and students at FMNS work in full compliance with and within the framework of the UP documents regulating ethical behaviour in research, teaching and evaluation.

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.

Discussions with the FMNS management during the on-site visit revealed that all policies, regulations, terms of reference and statements of responsibility relating to the administration and implementation of the study programs are being revised at UP level. This will take into account all relevant changes to the legal framework that defines all aspects of the work of higher education institutions, including teaching, research and labour relations. For example, the Strategy of the University of Prishtina, the Strategic Plan 2023-2025, is in line with the Strategic Plan of Higher Education of Kosovo 2022-2026.

		iance
Standard	Yes	No
Standard 1.1. The study program mission is in compliance with the overall mission statement of the institution.	X	
Standard 1.2. Relevant academic and professional advice is considered when defining the intended learning outcomes which are consistent with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area.	X	
Standard 1.3. The study program has a well-defined overarching didactic and research concept.	X	
Standard 1.4. There are formal policies, guidelines and regulations dealing with recurring procedural or academic issues. These are made publicly available to all staff and students.	X	
Standard 1.5. All staff and students comply with the internal regulations relating to ethical conduct in research, teaching, assessment in all academic and administrative activities.	X	
Standard 1.6. All policies, regulations, terms of reference and statements of responsibility relating to the management and delivery of the program are reviewed at least once every two years and amended as required in the light of changing circumstances.	X	

Compliance level: Fully compliant (100%)/Substantially compliant/Partially compliant

## ET recommendations:

1. Graduates and employer representatives should be more actively involved in the development of the study program and the definition of strategic research guidelines at the FMNS. This can be done through the development of the Alumni Association or

through appropriate questionnaires for graduates and employer representatives, which should be carried out systematically (and regularly, at least annually).

## 2.2. Quality Management

Standard 2.1. All staff participate in self-evaluations and cooperate with reporting and improvement processes in their sphere of activity.

Procedures that provide for the involvement of all staff in self-evaluation and collaboration for the purpose of reporting and improving the teaching, academic and administrative activities carried out at the FMNS have been established and clearly defined.

The Dean of the FMNS ensures the involvement and responsibility of all relevant factors of the institution's quality assurance system in accordance with the action plan, provides access to the data required to carry out the self-analysis in accordance with the relevant Quality Regulation, prepares an appropriate action plan and provides a budget for the improvement of institutional processes, including a fund for rewarding examples of good practice, all based on the results of the evaluation process.

The Committee for Quality Assurance and Evaluation, which includes representatives from the Faculty Administration, the Faculty Coordinator for Quality Assurance System, students and academic staff, is crucial to the quality assurance system at FMNS. In addition to liaising the quality assurance system at FMNS with the UP Office of Academic Development, the Coordinator supports teaching staff and students in the development of all elements of the quality assurance system, including the development of new and revision of existing study programs, coordination of all stakeholders relevant to study program development (including graduates and employers), prepares data and reports on the scientific work of the Faculty's organizational units in consultation with the management of FMNS, informs and advises teaching staff and students on student mobility, is responsible for all activities related to the quality assurance system and reports to the Vice-Rector for Academic Development on all elements of his/her own work.

The only potential shortcoming of the quality assurance system is the absence of graduates and employer representatives on the Committee for Quality Assurance and Evaluation. Their participation in this body would enable effective and faster implementation of the proposals of these stakeholders on the overall quality assurance system of the FMNS.

Standard 2.2. Evaluation processes and planning for improvement are integrated into normal planning processes.

The UP quality assurance system is based on the Law on Higher Education in the Republic of Kosovo and the UP Statute. Based on the UP Statute, the UP Senate has adopted the Regulation on Quality Assurance and Evaluation. The Regulations define the role and responsibilities of

all stakeholders at the level of UP and all faculties, as well as their participation in evaluation and quality assurance activities. In addition, the Regulation defines the mechanisms and processes by which the UP complies with the ENQA standards for quality assurance and evaluation. This document forms the basis for the implementation of the quality assurance system and evaluation at the FMSN.

The development of the study program and the research potential of the institution is based on the contribution of all relevant stakeholders. Teaching staff, for example, provide information relevant to development via a teaching staff self-evaluation questionnaire comprising three parts: the institution, teaching and research. Administrative staff complete a questionnaire that focuses on the professional preparation of administrative staff, their working conditions and their relationship with academic staff. Students complete two questionnaires: one in which they evaluate the institution as a whole, and one in which they evaluate each study course and the teaching staff involved in teaching individually. In addition, there are surveys for graduates and employee representatives, which are carried out every three years. The results of the surveys are processed and deficits and opportunities are identified in relation to individual study courses and the entire study program. Identified deficits are eliminated through regular changes to the study program and its study courses in order to achieve the expected learning outcomes. There is a broad discussion about the need for change, taking into account reasoned suggestions from all stakeholders, including teaching staff, administrative staff, students, graduates and employer representatives.

Based on an insight into procedures and on-site meetings with stakeholders, it is clear that although there is an appropriate process, the role of graduates and employers in the development of study programs and research areas is formal rather than actually used to improve all areas of the institution's activities.

Standard 2.3. Quality assurance processes deal with all aspects of program planning and delivery, including services and resources provided by other parts of the institution.

The quality assurance process is based on the Law on Higher Education in the Republic of Kosovo, the UP Statute and the Regulation on Quality Assurance and Evaluation. An internal and external evaluation of the quality assurance system has been developed.

While the external evaluation system is linked to the evaluation conducted by independent experts for the Kosovo Accreditation Agency, the internal evaluation involves all levels of the UP, including the Senate, the Rector, the Central Commission for Quality Assurance and Evaluation at the University level, the Office for Academic Development at the University level, the Deans of the Faculties, the Committee for Quality Assurance and Evaluation at the academic unit level, the Coordinator for Quality Assurance and Evaluation at the academic unit level, and the academic and administrative staff and students. The internal quality assurance system is established and the roles and responsibilities of all those involved are clearly defined. As mentioned above, the Regulation on Quality Assurance and Evaluation at the UP aims to define the mechanisms and procedures of quality assurance and evaluation at

the UP as well as the role and responsibility of the organizational and academic units - faculties - for the implementation of quality assurance and evaluation activities. The procedures for accreditation of study programs are established and clearly defined, instruments for assessing the quality of the study program/course are in place and implemented through quality assurance mechanisms (different types of questionnaires for academic and administrative staff and students). Supporting mechanisms for quality improvement have also been established, e.g. publication of scientific papers in journals by teaching staff and participation in international and national scientific conferences are monitored and evaluated. In addition, data on student performance is collected and monitored, e.g. the percentage of exams passed, the organization of colloquia, the duration of studies, etc. When a new study program is developed, it must first be approved at faculty level, and only then is it discussed and approved by the UP Senate.

According to the experts, the quality assurance process takes into account all aspects of program planning and implementation. In addition to the quality of teaching and learning, the quality of scientific activity, international cooperation, graduates' perception of the quality of their studies, employers' perception of the quality of graduates, the quality of services for students and the quality of organizational culture and management.

Standard 2.4. Quality evaluations provide an overview of quality issues for the overall program as well as of different components within it; the evaluations consider inputs, processes and outputs, with particular attention given to learning outcomes for students.

Internal and external evaluations are regularly carried out at study program level for all study programs offered at the UP, in accordance with the legal framework. Internal evaluations are based on the Regulation on Quality Assurance and Evaluation, while the external evaluations are carried out according to the standards set by the Kosovo Accreditation Agency.

The results of the assessment after the internal and external evaluation are used not only for the improvement of the curriculum, but also for the improvement of all elements of the quality assurance system. Since the continuous improvement of the curriculum is the responsibility of the teachers, there is a regular procedure that describes how the study program is refreshed. In addition to the feedback obtained via the various questionnaires, the opinions of experts obtained as part of the external evaluation also play an important role. In this way, not only the content of the study courses is improved, but also the way and forms in which students acquire the learning outcomes.

Standard 2.5. Quality assurance processes ensure both that required standards are met and that there is continuing improvement in performance.

According to the Regulation on Quality Assurance and Evaluation of UP, the objectives of the quality assurance system include the identification and promotion of good practises, the identification of elements that need to be changed to improve the current situation, the continuous improvement of quality at the UP and faculty level and the fulfilment of the requirements of the accreditation system in the Republic of Kosovo, as defined by the Accreditation Agency of Kosovo.

According to the experts, the way the Regulations define the quality assurance process ensures that the required standards are met and that there is continuous improvement in performance.

Standard 2.6. Survey data is being collected from students, graduates and employers; the results of these evaluations are made publicly available.

Surveys are regularly carried out among students which, in addition to evaluating the individual study courses and the teaching staff involved in their implementation, also include a survey on student satisfaction with the overall course of studies at the UP. Although the results of the student surveys are evaluated and used to improve the overall study process at FMNS and UP, the reports on the survey results are not made publicly available. Therefore, measures should be taken to make appropriate reports summarizing the results of the student surveys, as well as all other surveys conducted at FMNS, publicly available. Although the quality assurance system stipulates that graduate and employer surveys are carried out regularly every three years, there is no clear evidence that the results of these surveys are used to improve the quality assurance system, teaching and scientific work. This is evident from the discussions held during the site visits with representatives of graduates and employers who have either never participated in surveys or were unclear about their role in the quality assurance system. In view of this, the role of alumni associations, i.e. former students, needs to be strengthened at both UP and FMNS level.

Standard 2.7. Results of the internal quality assurance system are taken into account for further development of the study program. This includes evaluation results, investigation of the student workload, academic success and employment of graduates.

According to the experts, the results of the internal quality assurance system are taken up with due care and used to improve all elements of teaching, scientific and administrative activities at FMNS and UP level. In general, the improvement of all study programs conducted at FMNS is closely linked to the results of all surveys conducted, including those conducted with teaching and administrative staff and students, while the influence of graduates and employer representatives in this area is more formal, as mentioned above. The academic success of students, their academic and research performance and, to some extent, the employment dynamics of graduates are also monitored. All of this is discussed in the FMNS Committee for Quality Assurance and Evaluation and used to improve the curriculum of existing study programs through changes and revisions to the content of the study courses and the way in which each study course is organized and delivered.

Standard 2.8. 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.

The dynamics of producing reports on the overall quality of study programs is closely related to the accreditation procedures carried out by the Kosovo Accreditation Agency. For example, the existing study programs of the Department of Chemistry at FMNS were reaccredited this

year, and on this occasion, detailed self-evaluation reports were prepared, which form the basis for the external evaluation. The report on the overall quality of the study program is therefore prepared periodically, usually every three years.

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

All issues related to the quality assurance system are regularly discussed within the teaching staff, but also in regular meetings of the Central Commission for Quality Assurance and Evaluation of the UP and the Committee for Quality Assurance and Evaluation of the FMNS. The questionnaires used to assess student satisfaction, as well as the questionnaires used by other stakeholders in the quality assurance system, are constantly updated and improved as a result of the internal and external evaluations carried out at regular intervals at the FMNS and the UP.

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

consideration weaknesses.	within	the	institution	indicating	its	strengths	and		
Standard 2.9. themselves re	-	•		•	r the	program ar	e	X	

Compliance level: Fully compliant/Substantially compliant (89%) /Partially compliant/Non-compliant

#### ET recommendations:

- 1. Include a graduate and employer representative on the Committee for Quality Assurance and Evaluation Committee and generally ensure their greater influence on the overall quality assurance system at FMNS.
- 2. The results of surveys conducted among students and representatives of graduates and employers should be made publicly available after they have been processed and the corresponding reports have been prepared.
- 3. The role of graduates and employers' representatives needs to be more emphasised in the overall quality assurance system; one of the ways to achieve this is to support the work of alumni associations at the FMNS and the UP level.
- 4. The SER must be written in an evidence-based manner, i.e. each statement must be supported by an appropriate procedure or example.
- 5. Funding for workshops and seminars dedicated to the development of new study programs and the revision of existing ones should be provided by the FMNS management.

#### 2.3. Academic Staff

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.

The employment procedure is in compliance with the Labour Law and the Administrative Instruction on Accreditation of HEIs. The Program has 13 PhD holders across the 120 ECTS. The candidates for employment are provided with full position description and conditions of employment. The academic staff affirmed that they are well familiar with all aspects of the employment conditions. The teaching staff team includes 8 assistants and assistant professors - six of them are PhD holders and two are MSc holders. They are highly motivated and the sustainability of the Program is guaranteed. The data are presented as required.

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.

The management of the FMNS confirmed that the teaching staff comply with the legal requirements concerning the occupation of teaching positions included in the Administrative instruction on Accreditation.

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.

The academic staff of the program do not have another full-time employment contract at any other university.

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.

All members of the academic staff are full-time employees (100 %).

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.

Thirteen members (13) of the academic staff (out of 15 members in total) are PhD holders, as well as full time employees.

Standard 3.6: Opportunities are provided for additional professional development of teaching staff, with special assistance given to any who are facing difficulties.

A Centre for Excellence in Teaching is established in the UP (UPCET). The teachers are supported to develop their pedagogical competences by training in a line of basic and modern pedagogical courses. The training is mandatory for all assistants and assistant professors. The teaching staff highly appreciate this support and declare to implement the acquired skills and knowledge in their teaching activities. All interviewed members of teaching staff confirmed that they participated in at least one training. For those who experienced difficulties, more than one training is offered by the UPCET.

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.

Academic services are presented by providing peer-reviews for high ranked journals, as well as a membership in the Editorial Boards of seven prestigious journals. During discussions the participation in the advisory, scientific or organising committees of scientific conferences of teachers was confirmed. Consultations of students are regulated in the teachers' workload,

however during the discussion with the teachers it was confirmed that teachers are ready to provide additional and flexible consultation slots for the students. The community services are presented by expert advising of governmental institutions, participating in advisory committees or working groups of the Ministry of Education, Science, Technology and Innovation or other governmental institutions. The teachers confirmed that they are fully available for experts advising their graduates to solve professional issues connected with their work activities in the industry.

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.

Academic staff is evaluated two times per year by the students. Additionally, the teachers are regularly self-assessed. There is a well proven procedure to improve the teachers' performance in case of low estimation by the students. Additional pedagogical training is mandatory in this case; the improvement is monitored by the Faculty management; the Dean is directly involved in the procedure. In case of lack of advancement, the teacher contract is terminated. The results of assessments are not publicly available. The existing promotion process is mainly based on research achievements. A new assessment methodology is currently in a process of preparation. International advising is used in the assessment card drafting. The new assessment methodology includes the teaching activities and advancing in teaching of individual members.

Standard 3.9: Strategies for quality enhancement include improving the teaching strategies and quality of learning materials.

Strategies for quality enhancement include improving the teaching strategies and quality of learning materials. The applied strategy is not in the form of a regulation or another official document, however the team gets the impression during the discussion that the procedure and the strategy is well proven and well accepted by the teaching staff and the management of the FMNS. The interviewed members of teaching staff are familiar with all steps of the strategy/mechanism for quality enhancement. They confirmed regular improvement of learning materials at least once per year, nevertheless the results of the assessment. The teachers consider the improvement of learning materials and teaching methodology as a part of the academic ethic. The management is highly determined to follow the established strategy. The quality of teaching is regularly monitored. The results of evaluation are available in an electronic database. The results are reported to the Dean and the lowest 10 % teachers are specially trained to improve their teaching strategies. The UPCET is organized and the training is mandatory for each member of the teaching staff.

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.

According to the University regulations the teachers who retire at age limits or for other reasons lose their status as full-time teachers and are considered part-time teachers. There is a procedure to assign a title "Professor emeritus" for the retired professors. Currently, all teaching staff involved in the delivery of the study program are full-time employees.

Standard		iance
		No
Standard 3.1. Candidates for employment are provided with full position descriptions and conditions of employment. To be presented in tabular form data about full time (FT) and part time (PT) academic/ artistic staff, such as: name, qualification, academic title, duration of official (valid) contract, workload for teaching, exams, consulting, administrative activities, research, etc. for the study program under evaluation.	X	
Standard 3.2. The teaching staff must comply with the legal requirements concerning the occupation of teaching positions included in the Administrative instruction on Accreditation.	X	
Standard 3.3. Academic staff do not cover, within an academic year, more than two teaching positions (one full-time, one part-time), regardless of the educational institution where they carry out their activity.	X	
Standard 3.4. At least 50% of the academic staff in the study program are full time employees, and account for at least 50% of the classes of the study program.	X	
Standard 3.5. For each student group (defined by the statute of the institution) and for every 60 ECTS credits in the study program, the institution has employed at least one full time staff with PhD title or equivalent title in the case of artistic/applied science institutions.	X	
Standard 3.6. Opportunities are provided for additional professional development of teaching staff, with special assistance given to any who are facing difficulties.	X	
Standard 3.7. The responsibilities of all teaching staff, especially full-time, include the engagement in the academic community, availability for consultations with students and community service.	X	
Standard 3.8. Academic staff evaluation is conducted regularly at least through self-evaluation, students, peer and superiors' evaluations, and occur on a formal basis at least once each year. The results of the evaluation are made publicly available.		X
Standard 3.9. Strategies for quality enhancement include improving the teaching strategies and quality of learning materials.	X	
Standard 3.10. Teachers retired at age limit or for other reasons lose the status of full-time teachers and are considered part-time teachers.	X	

Compliance level: Fully compliant/Substantially compliant (90%)/Partially compliant/Non-compliant

#### **ET recommendations:**

- 1. Develop a procedure to make publicly available the results of regular evaluations at the level of the Faculty.
- 2. Include the teaching performance in the promotion process of teaching staff.

#### 2.4. Educational Process Content.

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.

The MSc Materials Science is modelled on qualification objectives including subject-related and interdisciplinary aspects. The acquisition of disciplinary, methodological and generic skills and competencies are based on mandatory subjects. Specialisation is assured in modern elective courses. The program provides students with the knowledge and skills necessary to address a variety of materials chemistry-related issues. In addition, the program has the potential to provide students with adequate communication skills for cooperation and coordination of ideas, joint activities, as well as problem-solving and critical thinking to obtain, process and interpret data and technical information in the field. This program also allows for the promotion of applied chemistry, as well as the establishment of a link between science, technology, and the economy in an effort to achieve sustainable development. Taking into account the interdisciplinary aspect of the program, the participation of teachers or researchers with expertise in scientific fields different from chemistry (as for example, applied physics, applied mechanics, etc.) will highly benefit the achievement of the program objectives.

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.

The intended learning outcomes of the Master's study program Materials Science are in line with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. The individual components are combined to achieve the specified qualification objectives. Different forms of teaching are presented in the program.

The project-based and research-based approaches are well included in the teaching and assessment process. The individual components present variability of students' activities and corresponding assessment forms. However, the program will benefit if learning outcomes are more precisely elaborated in order to correspond to MSc level with measurable characteristics.

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.

The Master's program in Materials Science offers specialized courses and training during which students will be prepared to be challenged with many specific problems in the field of modern materials, their design, obtaining and functionalization through up-to-date approaches. The disciplines within the curriculum are provided in a logical flow and generally 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. Nine learning outcomes for the evaluated study program are presented. The learning outcomes and the competencies are comparable with the programs delivered in EHEA, however need to be more precisely presented. The comparison with the corresponding program "Materials Science and Engineering" of the Université PSL (Paris Sciences & Lettres), France is presented. The evaluated program is comparable, the good practices are considered, but the program is specifically tailored to the envisaged qualifications and the specificity of Kosovo labour market. However, more critical consideration of the titles of the subjects presented in the French program should be done in order to present a more informative curriculum (for example "Programming" fully covers chemometrics and statistical approaches for treatment of data from chemical measurements and it is not related with development of specific IT codes). The disciplines in the curriculum are provided in a logical flow and could result in the defined competencies of graduates. The mandatory courses relate to the learning outcomes. Professional internship is not part of the program. The ratio between theory and practise for most of the subjects is 1:1 corresponding to the aim of the study program to provide practically oriented training. Elective courses are included in the program. The students should choose one from 2 offered elective subjects each semester.

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.

All disciplines within the curriculum of Materials Science have analytical syllabuses which comprise: 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.

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.

The language of instruction is Albanian. Teachers demonstrate fluency in English and some courses in the Program are also offered in English.

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.

During the interviews the expert team revealed that the student-teacher relationship is a partnership in which each assumes the responsibility of reaching the learning outcomes. The teachers confirmed that they are ready to adopt some aspects of the syllabuses according to the needs of the students. A line of examples was presented during the discussions.

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.

The discipline in the program applied various combinations of classical and innovative teaching strategies: presentations – based, problem-orientated, research-orientated, as well as project orientated approaches are applied through most of the subjects. There is variability of activities that guarantee the stated learning outcomes. The teaching strategies are fit for the different types of aimed learning outcomes. Various students' activities are assessed and contribute to the final results. Some of the subjects do not rely only on the classical exams but include assessments of different aspects of the students' activities and correspondingly developed competencies. 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. The teachers confirmed that the teaching strategy and assessment approaches are well adopted and flexible. A line of examples was presented during discussions with teachers.

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.

The presented student assessment mechanisms include various approaches for assessment of the students' advancement. Some of the programs present very detailed data about the relationship of learning outcomes and competencies with the different topics and activities included in the syllabuses. It could be considered as a good practice and recommended to other syllabuses and programs. There is well established practice in the Department of Chemistry to

clearly communicate to the students the assessment mechanism at the beginning of each study course. Moreover, the teachers confirmed that the students could access this information through the electronic system during the semester.

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.

SER and the presented syllabuses demonstrated that 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.

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.

The basic document setting out the policies and procedures for situations where student performance is inadequate or inconsistently assessed is the UP Statute, particularly in the parts relating to the determination of academic success (Articles 108-116) and student status, rights and responsibilities (Articles 145-163).

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 ECTS 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.

The program doesn't include a practice stage. However, some memorandums of understanding are signed to support the practical training.

Standard 4.12. To facilitate the practice stages, the higher education institution signs cooperation agreements, contracts or other documents with institutions/organisations/practical training units.

There are memoranda of understanding signed by the UP with some public institutions that could form the basis for the conclusion of contracts to implement professional practice in the future. Generally, cooperation agreements have not been signed. Teachers mentioned MoU with public institutions. A project "Bringing a gap between academia and industry" is implemented. The project aims to shorten the links with industry and should be a base for increasing the cooperation between UP and industry. Official policies and contacts are highly recommended.

Standard		iance
Standard	Yes	No
Standard 4.1. The study program is modelled on qualification objectives. These include subject-related and interdisciplinary aspects as well as the acquisition of disciplinary, methodological and generic skills and competencies. The aspects refer especially to academic or artistic competencies, to the capability of taking up adequate employment, contributing to the civil society and of developing the students' personality.	X	
Standard 4.2. The study program complies with the National Qualifications Framework and the Framework for Qualifications of the European Higher Education Area. The individual components of the program are combined in a way to best achieve the specified qualification objectives and provide for adequate forms of teaching and learning.	X	
Standard 4.3. The disciplines within the curriculum are provided in a logical flow and meet the definition and precise determination of the general and specific competencies, as well as the compatibility with the study programs and curricula delivered in the EHEA. To be listed at least 7 learning outcomes for the study program under evaluation.	X	
Standard 4.4. The disciplines within the curriculum have analytical syllabuses which comprise at least the following: the discipline's objectives, the basic thematic content, learning outcomes, the distribution of classes, seminars and applicative activities, students' assessment system, the minimal bibliography, etc. The full course description/syllabuses of each subject/ module should be attached only in electronic form to the self-assessment report for the study program under evaluation.	X	
Standard 4.5. If the language of instruction is other than Albanian, actions are taken to ensure that language skills of both students and academic staff are adequate for instruction in that language when students begin their studies. This may be done through language training prior to the commencement of the program.	X	
Standard 4.6. The student-teacher relationship is a partnership in which each assumes the responsibility of reaching the learning outcomes. Learning outcomes are explained and discussed with students from the perspective of their relevance to the students' development.	X	
Standard 4.7. Teaching strategies are fit for the different types of learning outcomes programs are intended to develop. Strategies of teaching and	X	

assessment set out in program and course specifications are followed with		
flexibility to meet the needs of different groups of students.		
Standard 4.8. Student assessment mechanisms are conducted fairly and		
objectively, are appropriate for the different forms of learning sought and	X	
are clearly communicated to students at the beginning of courses.		
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	X	
within a program, and in comparison with other study programs at highly		
regarded institutions.		
Standard 4.10. Policies and procedures include actions to be taken in to	X	
dealing with situations where standards of student achievement are	Λ	
inadequate or KAA inconsistently assessed.		
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		$\mathbf{X}$
allocated ECTS 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.		
Standard 4.12. In order to facilitate the practice stages, the higher		
education institution signs cooperation agreements, contracts or other		X
documents with institutions/organisations/practical training units.		Λ
*To be inserted the overview of the program (with all areas to be filled		
out)		

Compliance level: Fully compliant/Substantially compliant (83%)/Partially compliant/Noncompliant

## **ET recommendations:**

- 1. Define the general and specific learning outcomes according to ENQA guidelines for MSc level study. Present measurable learning outcomes.
- 2. Adjust the learning outcomes and competencies of each individual component of the program to MSc level.
- 3. Include a matrix of competencies-courses in the syllabuses to better define the progression of the learning.
- 4. Include practical training (internship) in the study program and allocate the corresponding ECTS.

- 5. Intensify the cooperation with industry for practical training of students (internship) and officialise the agreements as signed cooperation agreements, contracts or other official documents with institutions/organisations/practical training units.
- 6. The study program is to be further expanded, not only through the continuous introduction of new content into existing study courses, but also through the creation of some of the study courses in English, which will increase the interest of foreign students in an exchange and study at the UP.
- 7. Modern teaching methods such as project-based learning, flipped learning and design thinking should be integrated into the study program to the greatest extent possible.
- 8. Include teachers and researchers with expertise in scientific fields different from chemistry (such as physics, mechanics, etc) in order to cover the interdisciplinary nature of Materials Science.

#### 2.5. Students

It has to be mentioned in the very beginning, since this is a new study programme, some of the standards could not be evaluated or at least not evaluated in their full extent. Some standards, such as 5.4-5.7 are evaluated solely on the statements from the SER since no other proof could have been presented to the ET.

The admission procedure and the required documentation is regulated and thought out by MEST, UP and the Faculty on the basis of already familiar and well tested praxis from other institutions. Admission procedure seems to be transparent and fair for all applicants.

With the requested quota of 10 students per year, the ET believes there will be no issues with study group dimensions. This quota allows a more student-oriented teaching process and for a greater quality of the studies, along with more time available for research activities by the professors.

For standards 5.4 through 5.7, the final decision on compliance is made from the statements in the SER and from the examples from other studies. In this particular case, assessment based on examples from this study programme is not possible since this is the first evaluation and there are no students who can confirm or deny statements in the standard. Additionally, in standard 5.6, the SER only refers to additional examination terms, but nothing is stated in a narrower sense, for example special treatment in case of prolonged sickness, work obligations or other. For this reason, the ET is stating, in good faith, compliance with the standards with a remark for future evaluations to look more closely at these standards in order to assess them properly.

Standard 5.8 is not met since no plagiarism software is at the teacher's disposal.

Standard 5.9 is met because student rights are publicly available and the students have several bodies where they can place their appeals.

As for the final two standards, they are also deemed compliant in good faith since no exact examples are available yet.

While many of the standards could not be fully and/or properly assessed because there are no students, the ET is aware of some good and fair practices from BA BSc and MSc studies and firmly believes they will also be applied to the new study. However, it should be noted that even those practices can always be upgraded and made more efficient.

	Comp	liance
Standard	Yes	No
Standard 5.1. There is a clear and formally adopted admission procedure at institutional level that the study program respects when organizing students' recruitment. Admission requirements are consistently and fairly applied for all students.	X	
Standard 5.2. All students enrolled in the study program possess a high school graduation diploma or other equivalent document of study, according to MEST requirements.	X	
Standard 5.3. The study groups are dimensioned so as to ensure an effective and interactive teaching and learning process.	X	
Standard 5.4. Feedback to students on their performance and results of assessments is given promptly and accompanied by mechanisms for assistance if needed.	X	
Standard 5.5. The results obtained by the students throughout the study cycles are certified by the academic record.	X	
Standard 5.6. Flexible treatment of students in special situations is ensured with respect to deadlines and formal requirements in the program and to all examinations.	X	
Standard 5.7. Records of student completion rates are kept for all courses and for the program as a whole and included among quality indicators.	X	
Standard 5.8. Effective procedures are being used to ensure that work submitted by students is original.		X
Standard 5.9. Students' rights and obligations are made publicly available, promoted to all those concerned and enforced equitably; these will include the right to academic appeals.	X	
Standard 5.10. The students' transfer between higher education institutions, faculties and study programs are clearly regulated in formal internal documents.	X	
Standard 5.11. Academic staff is available at sufficient scheduled times for consultation and advice to students. Adequate tutorial assistance is provided to ensure understanding and ability to apply learning.	X	

Compliance level: Fully compliant (91%) / Substantially compliant / Partially compliant / Non-compliant

#### **ET recommendations:**

- 1. Acquire plagiarism detection software.
- 2. Make sure to provide tangible and indisputable proof (in english language) for the next evaluation, especially regarding the administrative documentation.

## 2.6. Research

Standard 6.1 The study program has defined scientific/applied research objectives (on its own or as part of a research centre or interdisciplinary program), which are also reflected in the research development plan of the institution; sufficient financial, logistic and human resources are allocated for achieving the proposed research objectives.

The study program has defined scientific/applied research objectives. The objectives 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. (Regulations for the financing of research - scientific, artistic and sports activities at the University of Prishtina, 2020; Financial plan FMNS 2024).

Standard 6.2. Expectations for teaching staff involvement in research and scholarly activities are clearly specified, and performance in relation to these expectations is considered in staff evaluation and promotion criteria.

During the discussions with teaching staff of the program the expert team gets the impression that the expectations for teaching staff involvement in research and teaching activities are clearly specified. The research performance of the teaching staff is considered in staff evaluation and promotion criteria. The corresponding regulatory documents are developed and publicly available. None of the interviewed teachers showed any concerns about his/her professional development based on research activities. The publications in high ranked journals are specially supported by the UP (Statute of UP; Regulation on the establishment and functioning principles of the committee for ethics in scientific research, last amendment 2023; Research regulations and sponsored programs, last amendment 2019; Regulations for the selection procedures related to the appointment, re-appointment and advancement of academic staff in UP, last amendment 2022; Regulations for the establishment and principles of the commission for ethics in scientific research, last amendment 2023; Regulations for disciplinary measures and procedures against the academic staff of the University of Pristina, 2017; Regulations for the financing of research - scientific, artistic and sports activities at the University of Prishtina, 2020).

Standard 6.3. Clear policies are established for defining what is recognized as research, consistent with international standards and established norms in the field of study of the program.

Clear policies are established for defining what is recognized as research, consistent with international standards and established norms in the field of study program (Statue of UP; Regulation on the establishment and functioning principles of the committee for ethics in scientific research, last amendment 2023, etc). The corresponding regulations are presented and publicly available on the UP web page.

Standard 6.4. The academic staff has a proven track record of research results on the same topics as their teaching activity.

The academic staff has an impressive list of research publications in highly ranked journals on the same topics as their teaching activity.

Standard 6.5. The academic and research staff publish their work in speciality magazines or publishing houses, scientific/applied/artistic products are presented at conferences, sessions, symposiums, seminars etc. and contracts, expertise, consultancy, conventions, etc. are provided to partners inside the country and/or abroad.

The academic and research staff publish their work in highly ranked scientific journals (183 papers were published by the staff members of the program during the period 2018-2023), scientific and applied results are presented at conferences, sessions, symposiums, seminars, etc (the list is provided in the CVs). Additionally, the teaching staff members offer their expertise by providing consultations, expertise to national and international partners including expert functions for governmental agencies.

Standard 6.6. Research is validated through scientific and applied research publications, artistic products, technological transfer through consultancy centres, scientific parks and other structures for validation.

Research results of the academic and research staff of the MSc Materials Chemistry study program are validated mainly through scientific and applied research publications. 183 papers have been published in highly ranked journals for the last 5 years. Technological transfer is not reported or shared during discussions. Cooperation with research groups from the region and Europe within the CEEPUS and ERASMUS+ programs as well as other international programs is well developed and proves the quality and validation of research.

Standard 6.7. Each academic staff member and researcher has produced at least an average of one scientific/applied research publication or artistic outcome/product per year for the past three years.

On average the teaching staff present a remarkable list of publications. The academic staff have produced on average 3 or more research publications (scientific papers and conference presentations) during the last three years. Three members present less than 3 scientific papers published in indexed journals for the last three years (based on SER and CVs data).

Standard 6.8. Academic and research staff publish under the name of the institution in Kosovo they are affiliated to as full-time staff.

Academic and research staff publish under the name of the institution in Kosovo they are affiliated to as full-time staff. List of papers with DOI numbers was provided.

Standard 6.9. 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.

Academic staff shared during the discussions that they include in their teaching activities and materials information about their research and scholarly activities that are relevant to courses, together with other significant research developments in the field. The teaching staff demonstrated an experience in development of new and innovative students' assignments and diploma thesis based on the staff research results. The expert group was provided with examples of students' projects reports and diploma thesis during the visit of the department. The staff is offering research-based teaching, influencing the development of students' skills in research work, building hypotheses, testing them, planning work, etc (Research based teaching AWARD 2023, 2023; Liridon Berisha, Tahir Arbneshi, Arsim Maloku, Fatmir Faiku, 2023).

Standard 6.10. Policies are established for ownership of intellectual property and clear procedures set out for commercialization of ideas developed by staff and students.

SER reported that the intellectual property at the UP is regulated by the Kosovo Law on Intellectual Property (adopted in 2011). The law in question was adapted in 2016 to the European Union directives on intellectual property. Additionally, the Statute of the University, article 47, imposes the development of the policies for intellectual property.

Standard 6.11. Students are engaged in research projects and other activities.

The Department of Chemistry demonstrated that they have a well established tradition to engage students in research projects and other activities. A project directly focused on Research based teaching funded by MSEI of Kosovo (2022-2023) was implemented in the Department of Chemistry.

Standard		liance
Standard	Yes	No
Standard 6.1. The study program has defined scientific/applied research objectives (on its own or as part of a research centre or interdisciplinary program), which are also reflected in the research development plan of the institution; sufficient financial, logistic and human resources are allocated for achieving the proposed research objectives.	X	
Standard 6.2. Expectations for teaching staff involvement in research and scholarly activities are clearly specified, and performance in relation to these expectations is considered in staff evaluation and promotion criteria.	X	
Standard 6.3. Clear policies are established for defining what is recognized as research, consistent with international standards and established norms in the field of study of the program.	X	
Standard 6.4. The academic staff has a proven track record of research results on the same topics as their teaching activity.	X	
Standard 6.5. The academic and research staff publish their work in speciality magazines or publishing houses, scientific/applied/artistic products are presented at conferences, sessions, symposiums, seminars etc. and contracts, expertise, consultancy, conventions, etc. are provided to partners inside the country and/or abroad.	X	
Standard 6.6. Research is validated through scientific and applied research publications, artistic products, technological transfer through consultancy centres, scientific parks and other structures for validation.	X	
Standard 6.7. Each academic staff member and researcher has produced at least an average of one scientific/applied research publication or artistic outcome/product per year for the past three years.		X
Standard 6.8. Academic and research staff publish under the name of the institution in Kosovo they are affiliated to as full-time staff.	X	
Standard 6.9/6.8. Academic staff are encouraged to include in their teaching information about their research and scholarly activities that are relevant to courses they teach, together with other significant research developments in the field.	X	
Standard 6.10. Policies are established for ownership of intellectual property and clear procedures set out for commercialization of ideas developed by staff and students.	X	
Standard 6.11. Students are engaged in research projects and other activities.	X	

Compliance level: Fully compliant (91%)/Substantially compliant/Partially compliant/Non-compliant

#### ET recommendations:

- 1. Intensify the research activity of each member in the field of materials science including different types of materials.
- 2. Ensure that each member of the teaching staff has published research results in the field of the teaching subject.

#### 2.7. Infrastructure and Resources

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.

The long-term implementation of the study program is ensured by the premises: a new building is built, appropriate space is planned for the study program as specialised laboratories, lecture halls with adequate number of working places.

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.

The financial plan for 2024 at the level of the FMNS as well as a long term financial plan that would demonstrate the sustainability of the study program for the next minimum three years are provided. According to SER, the Department of Chemistry (including this study program) has an annual financial plan covering the consumables, reagents, solvents, equipment, transport and accommodation required for laboratory work, which ensure the sustainability of the study program for the coming years.

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.

The Department of Chemistry as part of FMNS is located in a separate building and no other object has been rented. The laboratory equipment is a property of the University. All used software is licensed (SER), however a list of the software and the licence is not provided. The chemistry department library is equipped with a reading room; however, the conditions are not at an appropriate level. During the on-site visit the expert team contacted that the available books are too old, the currently used books are available at the teachers upon demand. The students could use the university library without limitations. The provided list of books related to the study program is not informative and the expert team is not able to conclude completely on it. The periodicals available in the library are not up to date. The UP library offers access to digital databases such as Science Direct, etc. The teachers provided modern books using their personal contacts and accounts in the frame of projects.

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.

The current building of the Department of Chemistry has 4 classrooms (210 m²), 24 laboratories for students and researchers (1152 m²), 21 teachers offices (281 m²) and 6 administrative or supplementary offices (239 m²). A hall equipped with computers is available for students. The department also uses the research laboratories and lecture halls of the Faculty. The number of seats in the lecture room is adequate to the students' group of the program, the number of working places in the laboratories correspond to the number of students in the group (the teachers confirmed students' group of 5-7 people in the MSc program). The presented plans for the Department of Chemistry in the new building of FMNS demonstrate that adequate space and equipment is envisaged: 12 individual working places, the laboratories are equipped with enough laboratory furniture and ventilated hoods. Four specialised laboratories and two research laboratories are planned for the study program in the new building. The current premises are 2041 m². However, as this space is used by all programs in the Chemistry department, the teachers revealed that currently the space is not enough. Due to the large number of students' groups there is a confusion in the teaching schedule during the working days.

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;

Fulfilled. The department library is 160 m<sup>2</sup>, the data about the University library are not provided.

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;

Fulfilled.

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;

Partially fulfilled. The additional documents requested from the FMNS show that there are not enough books at the institution that cover the field of Materials science. On the other hand, it is clear from discussions with teaching staff during the visit that teaching staff provide students with all the necessary and additional literature from their own libraries and by borrowing it from colleagues working at universities and academic institutions abroad.

- 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; Partially fulfilled. The number of modern books should be increased.
- e) a sufficient number of subscriptions to Albanian and foreign publications and periodicals, according to the stated mission.

Fulfilled.

Standard 7.6. The infrastructure and facilities dedicated to the implementation of the program is adapted to students with special needs.

Currently, the infrastructure and facilities are not adapted to the students with special needs, however the new building of the FMNS offers more possibilities.

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

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

 $\begin{tabular}{ll} \textbf{Compliance level:} Fully compliant/ \textbf{Substantially compliant (83\%)}/ Partially compliant/ Non-compliant (83\%)/ Partially compliant/ Non-compliant/ Partially compliant/ Part$ 

## **ET recommendations:**

- 1. Increase the number of books (printed and electronic) in the field of Materials Science issued in the last 10 years.
- 2. Ensure access to a larger number of scientific databases.

- 3. Motivate teachers to prepare teaching materials (books, manuals, etc) dedicated to Materials Science in the language of teaching.
- 4. Ensure that the necessary conditions are in place so that teaching can begin in the new premises as soon as possible.

## 3. FINAL RECOMMENDATION OF THE ET

Evaluation has been carried out in agreement with the KAA Accreditation Manual (2022) and the schedule provided by the KAA. All meetings took place as scheduled. All participants in the meeting contributed actively.

Information provided in the SER was limited, with general description of the activities in most of the standards. The evidence provided in SER was scarce and was not organized in a way to demonstrate which standard they support. A lack of quantitative data could be highlighted. During the meetings with Faculty managements most of the missing regulatory documents were presented in printed form. SWOT analysis for each standard area was given in SER. Although some supplementary documents and data were required, the information was presented on time. The evaluation of the Program was balanced between documentation provided and declaration of the staff. The Expert team recommends the SER to be prepared following strictly the KAA manual, to include quantitative data to prove standard achievement, to provide evidence for each statement in the SER as annexes.

Mission, objectives and management are consistent with a public university program. Budget and infrastructure are currently improving: a new building was built for FMNS and the management expectation is they will move in 2025. The project is funded by the EU and includes equipment. The infrastructure could be expected to maintain the Program in a sustainable way during the next few years. However, the active measures should be taken at all levels in UP in order to start implementation of the new program in new premises as soon as possible.

Academic staff is well trained, their research production is remarkable, the team is balanced with teachers at different levels of professional development. The young researchers are well trained, highly motivated and with good scientific record, as well as active mobility in highly ranked institutions. The staff is very active in attracting external research funding. The staff well estimated the University support for their professional development. The research results are innovatively incorporated in the teaching activities. The educational process is well organised, flexibility for students to choose their way by appropriate elective courses is provided. A drawback of the program is the lack of practice training (internship). The expert team recommended the internship to be mandatory to fully achieve the learning outcomes and competencies corresponding to MSc level. The included elective courses are modern and

correspond to the achievements in the research in the field, however more interdisciplinary electives will benefit the program.

The curriculum contains subjects which present the state-of-the art in the field of Materials Science and assure the achievement of learning outcomes and competencies at MSc level. The individual components of the program need careful revision to describe learning outcomes corresponding to MSc level with measurable characteristics. The research component is highly presented in the program. There is a well established mechanism to include students in the development and maintaining the quality of the program. The graduate from the Department of Chemistry considers her-self well prepared for the current labour market in Kosovo and it could be expected for the graduates of the new program. The employers are satisfied with the possibility to influence the program and expressed their readiness to support the study program. They declared that memorandums of understanding are currently implemented.

In conclusion, the Expert Team considers that the study program MSc Materials Science offered by the University of Prishtina is substantially compliant with the standards included in the KAA Accreditation manual (2022) and, therefore, recommends accreditation of the study program for a duration of five years with a maximal number of student per year enrolled in the program: 10.

## Overall compliance:

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

**Compliance level: Substantially compliant** 

Student quota recommended/Three or Five Years: 10 students per year/ Five years

# **Expert Team** Member Prof. Andriana Surleva, PhD May 13, 2024 (Print Name) (Signature) (Date) Member Prof. Bruno Zelić, PhD May 13, 2024 (Signature) (Print Name) (Date) Member Juraj Bogat May 13, 2024

(Print Name)

(Date)