



UNIVERSITY OF PRISHTINA “HASAN PRISHTINA”

FACULTY OF CIVIL ENGINEERING (2023)



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Ref. nr. _____

Prishtinë _____ 2023

SELF EVALUATION REPORT ACCREDITATION OF THE STUDY PROGRAMME

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Prishtina, January 2023

FACULTY OF CIVIL ENGINEERING
INTEGRATED WATER RESOURCES MANAGEMENT (MSc)
STUDY PROGRAMME

ACCREDITATION

SELF-EVALUATION REPORT - SER

December, 2022, PRISTINA

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1. INTRODUCTION

1.1. A brief overview of the institution

The Faculty of Civil Engineering (FCE) is an academic unit of the University of Prishtina. The University of Prishtina is a public institution of higher education, which organizes and develops university studies and advanced scientific and professional work. The main role of the modern academic unit in a democratic society, is to provide excellence in professional education by pursuing contemporary scientific developments in the relevant field of studies.

- **Mission and objectives of the study programme**

The mission of FCE is based on the mission of the University of Prishtina, to develop academic activities, research, scientific work and to create professional staff of higher education for the labour market for the fields of civil engineering in accordance with strategic and developmental interests at the country level.

Teaching and research are the main activities of this academic unit. The activity of an academic unit is characterised by the interaction between the teaching and the scientific-research. To achieve the desired results teaching must be inseparable from scientific research.

The FCE the main activities are focused on:

- teaching and learning,
- continuous scientific research in service of society and the country,
- professional developments compatible with market requirements,
- development of activities required according to the market demands,
- providing services and expertise to third parties,
- research on patent development by academic staff.

The FCE seeks to have a leading role in the development of education, science, society and the economy, as well as to create and support the highest standards in teaching and learning. The FCE seeks to match the European standards and to be fully integrated into the European Higher Education Area according to the Bologna Declaration.

The FCE mission is to create, develop, protect and transmit knowledge through teaching and research work, as well as provide opportunities for all residents of Kosovo, who would benefit from this education throughout their lifelong experience, without any constraints.

In addition, university level studies within academic units, are able to prepare students to easily adapt to the basic positions at the labour market. At the same time, the university level creates good premises for continuing further studies at higher levels, through easily transferable knowledge in related disciplines.

The Faculty of Civil Engineering organises study programme at BSc and MSc levels, while currently no Doctoral programme are available yet. FCE Study Programmes are classified at Departments and Levels as in the following:

- Construction (BSc), (MSc)
- Hydrotechnics (BSc), (MSc)
- Geodesy (BSc), (MSc), and
- Environmental Engineering (BSc)

The study programmes Construction, Hydrotechnics, Geodesy and Environmental Engineering, generally consist of the general subjects, subjects of professional formative character, integrative, professional, complementary subjects and Master's degree thesis which is based in the application of acquired knowledge and in preliminary research.

Table 1: Number of current students in Study Programmes

	Bachelor			Master			Total		
	Total	F	M	Total	F	M	Total	F	M
Construction	635	121	514	108	19	89	743	140	603
Hydrotechnics	186	41	145	50	18	32	236	59	177
Geodesy	208	44	164	48	18	30	256	62	194
Environmental Engineering	101	68	33				101	68	33
Road Infrastructure				3	2	1	3	2	1
TOTAL	1130	274	856	209	57	152	1339	331	1008

The total credits foreseen for the completion of the Bachelor Programme in the Departments: Construction, Hydrotechnics, Geodesy and Environmental Engineering is 180 ECTS credits, including the diploma thesis, over a minimum of 3 years (6 semesters).

In addition to Bachelor studies, the Faculty of Civil Engineering also offers Master studies in the Department of Construction, Hydrotechnics and Geodesy.

The total of the foreseen credits for the Master's in: Geodesy, Construction and Hydrotechnics, is 120 ECTS credits, including Master's degree thesis, for a duration of 2 years (4 semesters).

- **Leadership, Management, academic and administrative staff**

The University of Prishtina operates according to the Statute of the university of Prishtina [A1] (see 06-Annex-List of References) or [S1] (see the link in the table with titles and description of regulations / policies, in Standard 1.4.), which includes: academic units as an integral part, relevant documents for the assistance of academic units. The University of Prishtina has collegial bodies starting from the Steering Council, the Senate, other functional committees, management staff and central administration. FCE uses all these to organize and develop academic activities, design and development of study programmes, teaching and learning, focusing on the student.

The Dean of the Faculty of Civil Engineering, according to the Statute of UP is a leader who creates a collegial, collaborative and study environment that serves the common interests of students, professors, managerial and administrative staff. The duties of the Dean of the HEI (Higher Education Institutes) are also described in the relevant documents of the central level of UP, (<https://uni-pr.edu/desk/inc/media/126A0EED-0A53-48A7-8E56-5875EE868FAC.pdf>) [A6] (see 06-Annex-List of References). HEI, respectively FCE has a built and stable management structure. Two members are elected from the academic staff with a regular employment contract in the capacity of vice dean. Vice-deans have separate and well-defined tasks. One of the vice-deans is responsible for teaching and learning, organizational issues with students and organisational issues of the academic unit while the other vice-dean is responsible for financial issues and the infrastructure of the institution. Based on the Statute of UP, the Dean organises the departments according to the relevant documents of UP and FCE.

Within FCE there are departments corresponding to the respective fields of study with special study programmes of the Bachelor and Master of Science level. The FCE Departments, are (<https://fna.uni-pr.edu/Departments.aspx>):

- Department of Constructions,
- Department of Hydrotechnics,
- Department of Geodesy, and
- Department of Environmental Engineering

The functioning of the departments, in the vertical line, means the participation of the academic staff in decision-making up to the Council of the academic unit, respectively the Dean of the Faculty. For the competencies of FCE from UP, decisions are taken in the Faculty Council, namely the Dean of Faculty.

The administration of UP is centralised and provides services to all academic units on many issues, such as finances, student services (diplomas, etc.), contracts for academic and administrative staff. The administration of the Faculty has limited executive powers. The Faculty of Civil Engineering consists of the Secretary, as the highest function and responsible for the administration at the level of the academic unit, service for students, IT-staff, economist-financier, protocol service, asset manager and laboratory technicians.

- **Students, relevant contextual areas of the institution activity**

The Faculty of Civil Engineering offers bachelor studies programmes for various fields of study (Construction, Hydrotechnics, Geodesy and Environmental Engineering), based on the Statute of UP and according to the NQF National Qualifications Framework (https://akkks.rks-gov.net/uploads/korniza_kombetare_e_kualifikëve_2020.pdf), which are dedicated to candidates from the Republic of Kosovo, who have completed secondary education according to Ministry of Education, Science, Technology and Innovation (MESTI) framework for secondary education and candidates from other countries according to approved quotas <https://uni-pr.edu/desk/inc/media/AEE5CABB-5CD7-4418-9489-03949385902A.pdf>. For the registration of new students in the basic study programmes in FCE, the competition is announced by UP <https://uni-pr.edu/desk/inc/media/308524D5-4D04-418C-B904-A574F890E195.pdf> specifying all criteria and quotas. After the announcement of the competition, FCE administers and evaluates the entrance exams. It also considers high school grades and the Matura exam results before announcing the names of the admitted students on the faculty web page and assigned spaces.

HEI organises Master of Science (MSc) programmes in the same fields as BSc (Constructive, Hydrotechnics and Geodesy). The study programmes are dedicated to students who have completed basic studies and reached 180 ECTS in their BSc studies. For the enrolment of new students in Master programmes, a public competition is also announced by the University of Prishtina, which specifies the criteria and quotas. After the announcement of the competition, FCE organizes the exams, evaluates them, considers the success from basic studies, and announces rankings on faculty web page and assigned spaces.

The Faculty of Civil Engineering is dedicated to teaching and learning, where always keeping the student in the centre of attention. Excellence of teaching is achieved through research work carried out by the academic staff of the HEI. The engagement of academic staff in the fields of research is present not only in the country, but also abroad, offering contributions to conferences with papers published in the prestigious journals in the field. FCE's collaborations with other educational institutions in the country and abroad inspire the management and academic staff, the institutional and academic contribute to the needs of the labor market. The academic staff of FCE makes valuable contributions to the various services of the Faculty as required. Some of these jobs are enumerated in various reports and analyses for the needs of the Faculty, such as the Study Programm Evaluation Report. Therefore, the management of

FCE together with the academic staff and the administration are engaged not only in teaching, but also in enhancing the performance of teaching, scientific research and other services necessary for the Institution.

- **Teaching, learning and curricula**

UP provides bachelor's, master's and doctoral studies, according to the Bologna system. Although the Republic of Kosovo does not yet formally participate in the Bologna Process, UP is one of the first institutions of higher education in the region to start reforms under this Process. Implementation of reforms began in the academic year 2002/2003 and is still ongoing. UP is committed to achieving the objectives set out in the Bologna Declaration and the communiqués of Prague, Bergen, Berlin and London; UP aims to be integrated into the European Higher Education Area. The University is of high importance as a public provider of higher education in Kosovo and contributor to the country's society, community and economy.

UP's goal of "the development of academic education, scientific research, artistic creativity, professional consultancy" is accompanied by a set of eight detailed objectives, which clearly promote the university's ambition to become the leading university in Kosovo, to be active in society and to establish and maintain the highest standards in teaching, learning and research, as well to be fully integrated into the European Higher Education Area as an internationally recognized university.

Teaching is the main pillar of the Institution around which the developments of other scientific and research activities are supported, in order to achieve the general and specific objectives of the study programme.

The institution applies modern teaching methods, reflecting its creative young pedagogues, their impressive professional experience and their academic accomplishments.

Among the teaching methods and techniques is also "one-directional teaching" (from lecturer to student), which encourages students to participate directly in active learning. These teaching methodologies put the pedagogue in roles of a professor and moderator. To maintain their knowledge of modern teaching methodologies, faculty participate in various permanent trainings organized by the University <https://uni-pr.edu/page.aspx?id=1,78>.

Academic staff is free to choose the most appropriate methodology to develop and organise their courses, whether it is lecture, numerical exercise, field training or lab exercise. Special importance is given to the subjects that integrate real-world examples through practical field visits and laboratory exercises.

An important feature of the Institution is continuous monitoring and evaluation of teaching and instructors during the development of the study programme. This monitoring is followed by the evaluation of all instructors engaged in the student-evaluated study programme. The highest quality of learning is achieved through teaching assessment instruments.

Each subject has its basic coursework literature according to the syllabus that consists of obligatory and optional literature, which the Student can easily find, or is provided by the instructor in advance.

Curricula of study programmes for both basic and master studies are based on the basic formative principles of the study programme, starting from the formation of the group of general information subjects, to the group of theoretical scientific subjects and the group of professional specific subjects from which the special competencies of students emerge after graduation.

1.2. A brief overview of the Programme under evaluation

Table 2: Programme Overview in Evaluation

Name of Institution:	University of Prishtina
Faculty/Department:	Faculty of Civil Engineering
Main Campus and / or Branch:	Main Campus
If applying for a Branch, please specify the branch:	NA
Study Programme Name:	Programme - Integrated Water Resources Management
Person responsible for the Study Programme:	Prof. Dr. Laura Kusari
Accreditation / Reaccreditation:	Accreditation
Qualification level according to NQF:	Level VII
Academic degree or the name of the academic degree in the diploma:	Master of Science in Integrated Water Resources Management
ECTS:	120
Study programme profile (specializations):	Hydrotechnics
Field of study according to Erasmus Subject Area Codes (ESAC)	06.4
Form of studies:	Regular studies
Minimum duration of studies:	2 years
Number of places for study:	20
Indicate the permanent scientific / artistic staff for the Study Programme (at least 3 PhD):	Prof. Dr. Laura Kusari Prof.Asist.Dr. Lavdim Osmanaj Prof.Asoc. Dr. Figene Ahmedi

The Integrated Water Resources Management Master programme (MSc IWRM) is part of the Department of Hydrotechnics, an integral part of the Faculty of Civil Engineering. The activity of this department combines teaching and research, to achieve high academic results. This activity will create professionally trained staff and be compatible with market demands. To achieve this goal, MSc IWRM study programme teaching staff has the necessary qualifications and experience in both teaching and research.

Being part of FCE, the Department of Hydrotechnics, the IWRM Master Programme follows all standards, criteria, policies and regulations of the Faculty of Civil Engineering, respectively the University of Prishtina.

The Department of Hydrotechnics offers Bachelor and Master degree programmes, according to the Bologna system. The Hydrotechnics Master's study programme is offered to the students who have gained 180 ECTS from Bachelor studies. The Hydrotechnical Department has been offering Master studies since 2001. In fact, first Master's programme in the Hydrotechnical Department was developed and implemented with the help of the Government of Finland, starting in the 2001/02 academic year. Master courses on Water and Environmental Management (WEM), were delivered mainly by professors from Finish Universities, with the help of professors from our Hydrotechnical Department, Faculty of Civil Engineering. Since 2001/02 academic year, Faculty has been offering master studies in the Hydrotechnical Department.

The Master of Science degree in the Hydrotechnical Department has been ongoing since 2001. The most recent accreditation lasts until 30 September 2024. The Master's Degree in the Hydrotechnics aims to provide professional educational advancement in accordance with scientific developments in the fields of technical studies of water engineering.

The MSc IWRM study programme provides students competencies for the assessment and sustainable use of water resources, in relation to the transformation of the region towards renewal and water security. This master programme focuses on climate mitigation and adaptation as well as current societal challenges. The core of this programme is water security in the context of climate change.

Given the trends of continuous development of our country's economy and industry is increasing, urbanisation has accelerated. Hence, the demands for natural resources and especially water have increased. In addition to increasing water supply demands, the situation is exacerbated by increasing population demand based on increased quality of life, increased demand for irrigation, water use for energy, increased urbanization and climate change. Moreover, in addition to the increased water demand, their continued pollution and degradation of water quality must also be taken into account. Increasing demand for water and degradation of water quality poses a continual burden on existing water resources. Therefore, it is more than necessary that these resources be used optimally and we are committed to protecting them.

All these are clear indicators that the field of Integrated Water Resources Management needs qualified personnel who will be responsible for the optimal planning, design and operation of water resources systems. Educated personnel in this field will enable the best possible choices for our water resources. They will also be committed to respecting and meeting environmental criteria.

To address these challenges, the Integrated Water Resources Management study programme is designed with an interdisciplinary and integrated approach, to deliver sustainable human capacity building. The MSc of the Integrated Water Resources Management study programme prepares staff with broad knowledge of scientific and professional fields and fundamental changes in specialized professional fields as well as technological innovations by placing them in the local and international labour market.

To address these challenges, the MSc of the Integrated Water Resources Management study programme is designed with an interdisciplinary and integrated approach, to provide sustainable human capacity building and the best possible placement for the labor market (based on labor market demands).

2. PROGRAMME EVALUATION

2.1. Mission, objectives and administration of the MSc IWRM programme

Standard 1.1; The main mission of the Integrated Water Resources Management in Kosovo Programme (hereinafter MSc IWRM Programme) is to build long-term water resources management capacities at the national and river basin levels, in line with the socio-economic and political priorities of Kosovo and the Balkans, as well as the needs of sustainable development in the future. This is based on the social, economic and political priorities of the Balkan region. This MSc IWRM Programme aims to help replace the current fragmented approach with a more comprehensive and participatory approach to water resources management, in line with the principles of Integrated Water Resources Management (IWRM) and the EU Water Framework Directive (EU WFD).

Since the study programme Integrated Water Resources Management (MSc IWRM) is an interdisciplinary programme, which includes the Department of Hydrotechnics at the Faculty of Civil Engineering at the University of Prishtina as the main provider of the programme, as well as the Department of Biology at the Faculty of Mathematics and Natural Sciences at the UP and the Faculty of Tourism, Hospitality and Environment Management at Haxhi Zeka University in Peja, all partners have participated in the design of the programme. Therefore the definition of the learning outcomes of the programme is the result of this cooperation and consultation between them. Continuous meetings have been held for this purpose.

It should also be noted that employers (mostly water companies and water regulatory authorities) were offered information on what training (competencies) graduate students should have after completing this master programme. Similar programmes have also been consulted in different countries as well as the international partner in the implementation of the programme, the Institute for Technology and Resource Management in tropical and sub-tropical countries (ITT) at the Cologne University of Applied Sciences.

From November 2021 until today we have had four meetings with representatives of TH Cologne, and continuous coordination with TH Cologne and the SKAT office in Kosovo. We have many electronic correspondences between TH Cologne and the SKAT office in Kosovo, that document this coordination regarding the development of the MSc IWRM Master programme.

The mission of the MSc IWRM study programme is consistent with the mission of the Faculty of Civil Engineering (FCE). The programme is oriented towards teaching, learning, continuous research and providing a programme designed to meet the main goals of the programme (see Standard 1.3). The MSc in IWRM study programme has a well-defined didactic and research concept. The Strategy of the Faculty of Civil Engineering continuously follows the objectives initiated through the Strategic Plan of the University of Prishtina that supports each study programme in fulfillment of these initiatives [S2 & S3]. By focusing on the quality of teaching, learning and research, this programme will become a sustainable programme. Progress will be measured by continuous reviews of the the MSc in IWRM study programme. Advanced scientific research (supported through grants-programmes and international projects, increases of institutional funding and research expenditures by 1% of the annual budget of UP (2020) [R4]; trainings on effective use of the ScienceDirect platform, as an opportunity to find relevant content in certain fields (2021); cooperation with the advisory body [T5] formed within the FCE; the establishment of new laboratories in the programme; and increases the quality of services for students.

The development of an interdisciplinary Master's Programme in IWRM (MSc in IWRM) has been identified as a priority as part of an earlier Programme-backed assessment process. Once established the MSc in IWRM will support a significant improvement to the educational offerings in areas related to water resource management for the country, and even prospectively the broader region. It needs to be

designed to equip different groups of (water) professionals dealing with/interested in specific aspects of water management with cutting-edge knowledge of the IWRM principles, processes and practices. Spreading this new knowledge among the country's professionals is expected to catalyse the transformation of current water management into a modern water governance system, able to bring forward the country's sustainability agenda.

The programme's interdisciplinary approach combines the engineering (such as civil engineering, hydrotechnics, environmental engineering, etc.), natural sciences (such as soil sciences, ecology, chemistry, etc.), social sciences (economics, sociology, political sciences) and humanities (anthropology).

The programme is implemented by the Consortium of Skat Consulting Ltd. Switzerland, and the Austrian Environment Agency (EAA), thanks to generous funding provided by the Swiss Agency for Development and Cooperation (SDC). In the implementation of educational activities, IWRM benefits from the specialized knowledge and long-term experience of the World University Services (WUS / SHUB) Austria.

Regarding the objectives of the master programme at IWRM, they are based on the education of experts who are engaged and intend to contribute in the field of water management. Since a comprehensive knowledge of future experts is required, then the main objectives of this programme are:

- Establishing a link between theoretical and practical knowledge in the field of IWRM;
- Training of experts with new and comprehensive knowledge in the field of IWRM;
- Creating opportunities to apply IWRM research to future water resources;
- Establishing bridges of cooperation between different areas related to water resources;
- Combining technical knowledge in the field of engineering with managerial, economic and social competencies.

Standard 1.2; According to the National Qualifications Framework [K1], the MSc in IWRM Programme belongs to level seven (7), which includes academic and professional programmes, the completion of which leads to a Master's degree. Students obtain the Master's degree through the demonstration of knowledge, skills and competencies for each subject in particular and the entire programme in general, within the period of study. New methodologies, the development of academic staff with participation in teaching, training for applications in scientific and professional projects, participation in conferences, scientific research publications, updating study programmes to adapt to labor market demands, consulting with the advisory body [T5] on market demands, discussions between parties within the FCE and FCE collaborations with outside parties (Institutions, companies and public, private, local and international organizations) with all help the MSc in IWRM programme to achieve learning outcomes in line with the National Qualifications Framework and the European Higher Education Area Qualifications Framework.

Standard 1.3; Over the coming years, the MSc in IWRM will help to create the environment for the envisaged transformation of Kosovo's water resources management through:

- (i) Supporting the development of institutional capacity for IWRM;
- (ii) Preparing coherent planning and technical documentation to inform future measures and water resource management decisions (e.g., River Basin Management Plans, other country-level policies, strategies, and plans);
- (iii) Supporting knowledge and skills development of (young) water professionals whilst facilitating relevant job creation; and
- (iv) Public awareness-raising on environmental issues and creating stakeholder participation mechanisms in water resources management.

In line with these strategic directions, the IWRM-K is designed to facilitate the adoption of a comprehensive country-level IWRM system by combining institutional and technical capacity development achievements incorporated into a comprehensive set of interlinked measures. A significant share of Programme-backed interventions is related to such capacity-building efforts, including knowledge and skills development of water professionals. Specifically, the MSc IWRM Programme is aiming to support state (water) administration, young (water) professionals, academics and researchers, CSOs/NGOs, and other stakeholders.

The MSc in IWRM has been pre-conceptualized in a way to help Kosovo improve its overall water resources management by shifting from the traditional approaches to contemporary holistic concepts that consider multiple aspects and rely on the integration of achievements of different scientific disciplines. It should also assist the country's transformation as it considers the ongoing EU accession process. Therefore, the EU-based water-related concepts, approaches, and legislation needs to be prominent in the syllabus.

Teaching in the MSc in IWRM Programme in a general context takes place through lectures, numerical and laboratory exercises, as well as through appropriate instructor - student cooperation in teaching and learning process.

Schematic training on IWRM that encapsulates multifaceted aspects relevant to contemporary water management - the science of water, the economics of water, politics of water, transboundary management, and financing for water management remain pertinent to building IWRM capacity in Kosovo. The MSc in IWRM will therefore take a nuanced approach by looking at specific water challenges of national water laws, negotiations, and management of water allocations; geographical and biophysical dimension; and financing mechanisms to ensure long-term water security in the country. Based on the current conceptual basis, the MSc in IWRM is set to:

- Contribute to the capacity building of young professionals and water practitioners, including stakeholders involved in water-related sectors. The approach adopted will create learning content and contribute to the overall development of the MSc in IWRM, including engagement, representation, and creation of an atmosphere for co-learning processes.
- Benefit from discussion forum and relevant case studies in addition to class lectures, thereby creating a mechanism for co-learning/peer-to-peer learning.
- Build upon collaboration with multiple partners, experts, and agencies who have a wide range of expertise in and insights into the regional (EU) and national (Kosovo) water sector perspectives.
- Look beyond the conventional standard master's programme models, by investing in multiple faculty members with the authority on the topics related to MSc in IWRM.
- Create a collaborative learning platform, that will encourage intellectual exchange, pedagogical innovation, and professional solidarity within the academic and research community of Kosovo.
- Mobilise a 'community of practice' and a national water task force through encouraging professional diversity involving distinctive disciplinary, theoretical, and thematic knowledge.

Based on current job requirements in the national and regional labor market, the following table provides an overview of typical positions and skills required.

Table 3 Overview of typical positions and skills required in different sectors

Sector	Employers	Positions / Skills
Research and development	Universities, Research Institutions, Private Sector, Research Focused Sector	Researchers, PhD Students, Coordinators, Research skills, theoretical knowledge, methodological skills.
Strategic Planning	Local, regional, national, public institutions, private sector in the field of environmental planning and management, NGOs	Programme Coordinator, Water Resources Managers, Environmental Experts, Project Managers, Managerial skills in strategic planning and management.
Operational planning and Implementation	Local and national public sector, private sector with a focus on environmental planning and management, NGOs	Project manager, water resources manager, environmental management expert.

Standard 1.4. As part of this SER for the MSc in IWRM Programme, a list of titles and a brief description of policies, guidelines and regulations is included. Such a list with titles and short contents as well as relevant links to existing regulations, announcements and decisions related to the mission, objectives and administration of the programme as well as other issues included in the SER (quality management, academic staff, teaching process, students, research and infrastructure) is provided in the following table. In the text of this SER, these policies, instructions, regulations and others are referred to in the same table (e.g. for the Statute of UP as: [S1]). Other regulations, guidelines and policies that are not included in this table, but addressing procedural, academic and other issues are attached to the “List of References” in this SER.

Table 4. Table with titles and brief description of relevant regulations / policies and links

Statute and Strategic Plans			
Ref.	Title	Short description	Links
S1	Statute of the UP	It is a statutory basis for the regulation, operation, financing, and quality assurance, including staff and students at the University of Pristina in accordance with European standards.	https://uni-pr.edu/desk/inc/media/661032D5-33DD-4CD6-B20F-BFE0AB89FB98.pdf
S2	UP Strategic plan	It contains strategic initiatives, including time, responsible actors, and implementation cost for initiatives.	https://uni-pr.edu/desk/inc/media/D7EAE629-A39D-4D4C-A598-93B7B5227EDB.pdf
S3	FCE Strategic Plan	It includes the ambitions, the initiatives envisaged by Alumni, our supporters, and partners.	https://fn.uni-pr.edu/desk/inc/media/5E990B2D-6A81-4D19-8EBF-34027EECBD93.pdf
Frameworks			
Ref.	Title	Short description	Links
K1	National Qualifications Framework	It promotes improvements to the quality of education and training. It aims to align qualifications with the requirements for employment and meet the needs of the economy and society in the country.	https://akkks.rks-gov.net/Documents/DownloadDocument?fileName=National%20Qualification%20Framework%20Handbook33366569.6563.pdf&original=National%20Qualification%20Framework%20Handbook.pdf

K2	Framework of Qualifications for the European Higher Education Area	It elaborates on qualifications framework, recommendations, and proposals for a comprehensive framework for higher education qualifications.	http://www.ehea.info/Upload/document/ministerial_declarations/EHEAParis2018_Communique_AppendixIII_952778.pdf
Regulations			
Ref.	Title	Short description	Links
R1	Regulation on re-accreditation preparation procedures at UP	It defines the form, processes, and procedures for preparing accreditation and institutional re-accreditation and study programs at the UP.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5C53e6391d-e725-4849-a09e-6045788c0dcd31.3.2021.pdf&rId=1170
R2	Regulation on selection procedures related to the appointment, re-appointment, and promotion of academic staff at UP	It includes the evaluation of the staff by academic staff as an evaluation committee for teaching, research, scientific, and service activities.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5Ce859c93c-d0c8-4e35-b16c-0ea5147dbde927.4.2022.pdf&rId=4569
R3	Regulation of the evaluation procedures for the engagement of external faculty in UP	It establishes evaluation procedures for the engagement of external faculty, including retirees.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5Ce8bd6c945-dbf0-4ade-8b7d-89c6b64818ea25.6.2021.pdf&rId=3419
R4	Regulation for the financing of the research activity - scientific, artistic, and sports in UP	It defines the ways of financing and allocating financial means for scientific and research publications by the academic staff and PhD students of UP.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5Ce8217096-5fdc-434d-aa77-e1e8cdfbf83b27.5.2021.pdf&rId=3406
R5	Regulation for Master of Science degree studies	It defines unique criteria for Master of Science degree studies.	https://studenti.uni-pr.edu/RregulloretPublic/ShkarkoRregulloren?dok=Rregulloret%5Ca17aef3b-1261-444c-bb1e-5417263be17615.3.2021.pdf
R6	Regulation on the electronic system for student management (SEMS) at UP	It defines the standards for the use of SEMS.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5Cbe9d4ec5-55f9-4e61-b075-613c7195564312.5.2021.pdf&rId=2390
R7	Regulation on academic mobility of students	It defines the procedures for student mobility.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5Ce6b0b3ed-e996-42de-9806-d12a653632c226.3.2021.pdf&rId=64
R8	Regulation on disciplinary measures and procedures applicable to the UP academic staff	It defines the disciplinary procedures and measures applicable in cases of disciplinary responsibility of the UP academic staff.	https://ekonomiku.uni-pr.edu/desk/inc/me-dia/BAF4228A-69BC-4345-8BB7-F71FF34C26F3.pdf

R9	Regulation on the procedures and disciplinary measures applicable to UP students	It defines the disciplinary procedures, disciplinary review bodies, and disciplinary measures and punishments against students.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5C4e2a301d-9a21-4d98-85cc-598eef42d18931.3.2021.pdf&rrId=145
R10	Regulation on the election procedure, establishment, and functioning of the student parliament (SP) and student councils (SC) of UP	It defines the procedures for the election of the SP and SC. It also defines the scope and issues that SP and SC address.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5C52c409f7-1629-49c4-a4a4-dab873ec097b13.5.2022.pdf&rrId=4598
R11	Regulation on the structure and working principles of the center for excellence in teaching at UP	It assists in advancing academic capacity and developing teaching systems by promoting effective and quality teaching that competes with the best universities in the region and the world.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5Cb4d8fe85-2619-44e5-85ef-79085c4db13129.3.2021.pdf&rrId=87
R12	Regulation on personal income of academic staff, allowances by functions, and other compensations in UP	It regulates the issues of personal income and compensation for the academic staff at UP (regular and engaged) and the creation of student groups.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5C86c0e3a8-8067-4b01-91fc-5166b1874eff24.10.2021.pdf&rrId=3455
R13	Regulation of quality assurance and quality assessment at UP Nr. 4/132 date. 30/12/2016	Regulates all processes and mechanisms for quality evaluation at UP	https://fn.uni-pr.edu/desk/inc/media/569B371A-9033-407D-B063-C285966A98A5.pdf
R14	Regulation for amending Regulation no. prot. 2-543, dated 22.10.2021, for personal income of academic staff, allowances according to functions and other compensations at the University of Prishtina	Additions to the Regulation No. Prot. 2-543 which regulates the issues of personal income and compensation for the academic staff at UP (regular and engaged) and the creation of student groups.	https://studenti.uni-pr.edu/RregulloretPublic/ShkarkoRregulloren?dok=Rregulloret%5C52c409f7-1629-49c4-a4a4-dab873ec097b13.5.2022.pdf

Decisions

Ref.	Title	Short description	Links
V1	The UP Senate's Decision to formalize instructions for conducting academic activities during the COVID-19 pandemic	It formalizes the guidelines for the conduct of academic activities during the COVID-19 pandemic (there are also announcements for virtual platform services in PDF format, sent by e-mail from the IT Office of the Rectorate).	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregulloret%5C15c8961b-7bdc-4fcc-b519-166fe39eb36e2.4.2021.pdf&rrId=2182
V2	MSc in IWRM Programme Holders	This decision announces the two holders of the IWRM Master Programme at FCE, as well as their obligations as Programme Holders.	See List of References V2

V3	MSc in IWRM Programme Coordinator	This decision states the coordinator of the IWRM Master Programme at FCE.	See List of References V3
V4	Completion of SER – decision on further procedures at the Academic Office for Development	This decision states the further procedures at the Academic Office for Development.	See List of References V4
Administrative Instructions/Regulations			
Ref.	Title	Short description	Links
U1	Administrative Instruction from MESTI for accreditation of higher education institutions	It includes the evaluation process outside of UP developed by KAA on the accreditation of Higher Education Institutions.	https://gzk.rks-gov.net/ActDoc-u-mentDetail.aspx?ActID=17952
U2	Administrative Instructions for Revising and Reviewing the Syllabi	It supports academic staff and instructors to adequately write, revise and review their curricula to better reflect course content and methodologies applied.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregullo-ret%5C4433d342-8016-4826-9374-e9a086f48d7b12.5.2021.pdf&rrId=2392
U3	Guideline for course evaluation by students and the usage of the results	Student evaluation for the courses, teaching staff, and administration that serves as a tool for self-improvement of the faculty in particular and the FCE study programme in general. These guidelines includes questionnaires for teaching staff, subjects, services, infrastructure, and administrative and support staff of the UP.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregullo-ret%5Ca55463ce-d0ce-4e7b-bfc6-3b3d4216192b29.3.2021.pdf&rrId=96
Other Documents			
Ref.	Title	Short description	Links
T1	Quality assurance at the UP	It includes the assessments of staff and teaching, students and learning, research activities and publications in scientific journals.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregullo-ret%5C653eda16-1d3f-4111-bd6f-277ff6829bdc12.5.2021.pdf&rrId=2391
T2	International cooperation	Erasmus + ICM Agreement (KA107).	https://uni-pr.edu/page.aspx?id=1.61
T3	Cooperation agreements in the FCE	Cooperation agreement between the FCE and Institutions, companies, and local and international organisations.	https://fn.uni-pr.edu/page.aspx?id=1.56
T4	Code of Ethics of the academic staff	To create a favorable environment for the dissemination, expansion and critical examination of knowledge as well as to further the search for truth and knowledge.	https://dokumente.uni-pr.edu/Dokumentet/Shkar-koRregulloren?dok=Rregullo-ret%5C18c680a7-7854-41fe-8533-3524dc70087a21.3.2021.pdf&rrId=51
T5	The FCE Advisory Body (AB)	Establishment of the AB.	https://fn.uni-pr.edu/page.aspx?id=1.45 https://fn.uni-pr.edu/page.aspx?id=1.82

T6	Alumni Community	The network of FCE professionals who serve as ambassadors who apply and disseminate the knowledge they gained during their BSc, MSc, and PhD studies.	https://fn.uni-pr.edu/page.aspx?id=1,49
T7	Student Council	Student council representatives from the FCE.	https://fn.uni-pr.edu/page.aspx?id=1,23
T8	Center for Career Development	It assists students and graduates in developing knowledge and skills that will help them during employment and provide information to graduates about studying at UP.	https://uni-pr.edu/page.aspx?id=1,78
T9	e-Career	It is a students' notification platform for various activities (at the FCE and UP).	https://fn.uni-pr.edu/page.aspx?id=1,41 https://uni-pr.edu/page.aspx?id=1,84
T10	Research infrastructure at the UP	Composition of laboratories in the academic units of UP.	https://www.uni-pr.edu/desk/inc/media/041DEACC-F20C-41F2-801E-B19DAE1F431C.pdf
T11	Introductory call for expression of interest in introducing a IWRM Master Programme	Introductory call for expression of interest in introducing a IWRM Master Programme	See List of References T11
T12	Application for the Master Programme – IWRM	This document includes the FCE application to the Master Programme in IWRM	See List of References T12
T13	IWRM-K and UP Letter of Agreement	Letter of Agreement between IWRM-K and UP	See List of References T13
T14	Public Presentation of IWRM Programme	The presentation took place at the Faculty of Civil Engineering, to a public audience including FCE staff, students and different institution representatives.	See List of References T14
T15	Letter of agreement between The Integrated Water Resource Management in Kosovo Programme and Technische Hochschule Köln/Institute for Technology and Resources Management in the Tropics and Sub-tropics	Letter of Agreement between The Integrated Water Resource Management in Kosovo Programme and Technische Hochschule Köln/Institute for Technology and Resources Management in the Tropics and Sub-tropics to support the Academic Partnership hosted by the University of Prishtina 'Hasan Prishtina' in implementing the Master's Programme in Integrated Water Resource Management	See List of References T15
T16	Memorandum of Understanding between Technische Hochschule Koln, Faculty of Spatial Development and Infrastructure Systems and University of Prishtina	Memorandum of Understanding between Technische Hochschule Koln, Faculty of Spatial Development and Infrastructure Systems and University of Prishtina to cooperate in any academic, scientific and institutional development field of interest	See List of References T16
T17	Memorandum of Understanding between - Faculty of Civil Engineering University of Pristina "Hasan	Memorandum of Understanding between -Faculty of Civil Engineering University of Pristina "Hasan Prishtina" and Faculty of Environmental and Mechanical Engi-	See List of References T17

	Prishtina" and Faculty of Environmental and Mechanical Engineering, Poznan University of Life Sciences, Poland 22.03.2022.	neering, Poznan University of Life Sciences, Poland to establish international academic exchange and educational cooperation	
T18	Erasmus+, Mobility for Students and Staff, Higher Education Student and Staff Mobility. Inter-Institutional agreement 2020-23, between Institutions from Programme and Partner Countries, Universita degli Studi Trento/Italia and University of Pristina. Signed on date 02 March 2021.	Mobility for Students and Staff – University of Trento and University of Prishtina	See List of References T18
T19	Erasmus+, Mobility for Learners and Staff, Higher Education Student and Staff Mobility. Inter-Institutional agreement 2022-24, between Institutions from Programme and Partner Countries, University of Natural Resources and Life Sciences, Vienna and University of Pristina, Faculty of Civil Engineering.	Mobility for Students and Staff – University of Natural Resources and Life Sciences, Vienna and University of Pristina	See List of References T19

Standard 1.5. All staff and students of the IWRM study programme comply with internal regulations relating to ethical conduct [T4] in teaching, research and evaluation in all academic and administrative activities.

Standard 1.6. The creation of the MSc in IWRM study programme is not seen as the culmination of the achievement of the curriculum development process. The MSc in IWRM programme is seen as a starting step that will continuously and systematically be updated. To make the programme sustainable, all parties within the FCE: FCE Management, FCE Academic Development Coordinator, Programme Coordinator, instructors, students, advisory community [T5], the FCE faculty and study committee, which consists of FCE staff and student representatives, as well as the FCE's Alumni community [T6] will contribute to the programme review, evaluation, and improvement. As such, the programme will be forwarded for evaluation to the relevant structures and mechanisms of the UP, namely the Vice Rector for Quality, Office for Academic Development (ADO), Quality Commission, and finally to the Kosovo Accreditation Agency (KAA). The latter provides recommendations through external experts, with which the programme is supplemented, improved and developed until the next revision. The MSc in IWRM programme review path is defined by: Statutory provisions, Regulations on accreditation preparation procedures and guidelines for syllabus review and revision [S1; R1; U2].

SWOT analysis for mission, objectives and administration

A. Strengths:

- MSc in IWRM supports a significant improvement of the educational offering in areas related to water resource management for the country, and prospectively the broader region.
- Trans-disciplinary knowledge among the diverse target audience, in terms of previous educational background and professional experience (e.g., engineering, economics, ecology, environmental science, social science)
- Equips future (water) professionals with contemporary knowledge and skills to manage real-life water resource management challenges and uncertainties.
- Aims to develop human capacities that will contribute to the preservation and improvement of the water resources management in the country and region.
- Composed curriculum that enables multidisciplinary collaboration.
- A multi-disciplinary approach - exposure, education, and experience.
- Introduction of more practical examples to understand the theoretical part-focus on case study approach.
- Bringing experienced expert lecturers from abroad.

B. Weaknesses:

- No weaknesses.

C. Opportunities:

- The programme is interdisciplinary, involving several academic units of UP, UPHZ and TH Cologne University,
- A new programme implemented in FCE is a good opportunity for professional advancement of all actors in the field of water,
- Utilizing the experience of international partners in academic and professional training,
- Utilizing cooperation with international partners to engage staff and students in various projects, funded by the international community

D. Threats:

- Inability to invite visiting professors from EU and beyond, to be guest lecturers.
- Lack of information about this study programme for students from abroad.
- Due to the pandemic, delays in cooperation with local and international institutions in joint research and academic exchange.

2.2 Quality Management

Standard 2.1. The Faculty of Civil Engineering continuously aims to maintain sustainability through quality assurance in favour of the community at home and abroad. Quality assurance in FCE relies on UP quality assurance instruments [T1].

The quality assurance system in UP "H. Prishtina" includes many of the decision-making and implementing bodies that assist the administrative and academic units for the continuous improvement of quality standards in accordance with the Statute of UP (S1), administrative instructions on the evaluation of Higher Education Institutions of the Ministry of Education, Science and Technology (MEST) and ENQA standards and guidelines. The highest authority in the reporting structures of UP for quality management is the UP Senate, while at the central level of the University is the Council for Quality Management. This Council reports directly to the University Senate through the Vice Rector for Quality Development (Figure 1).



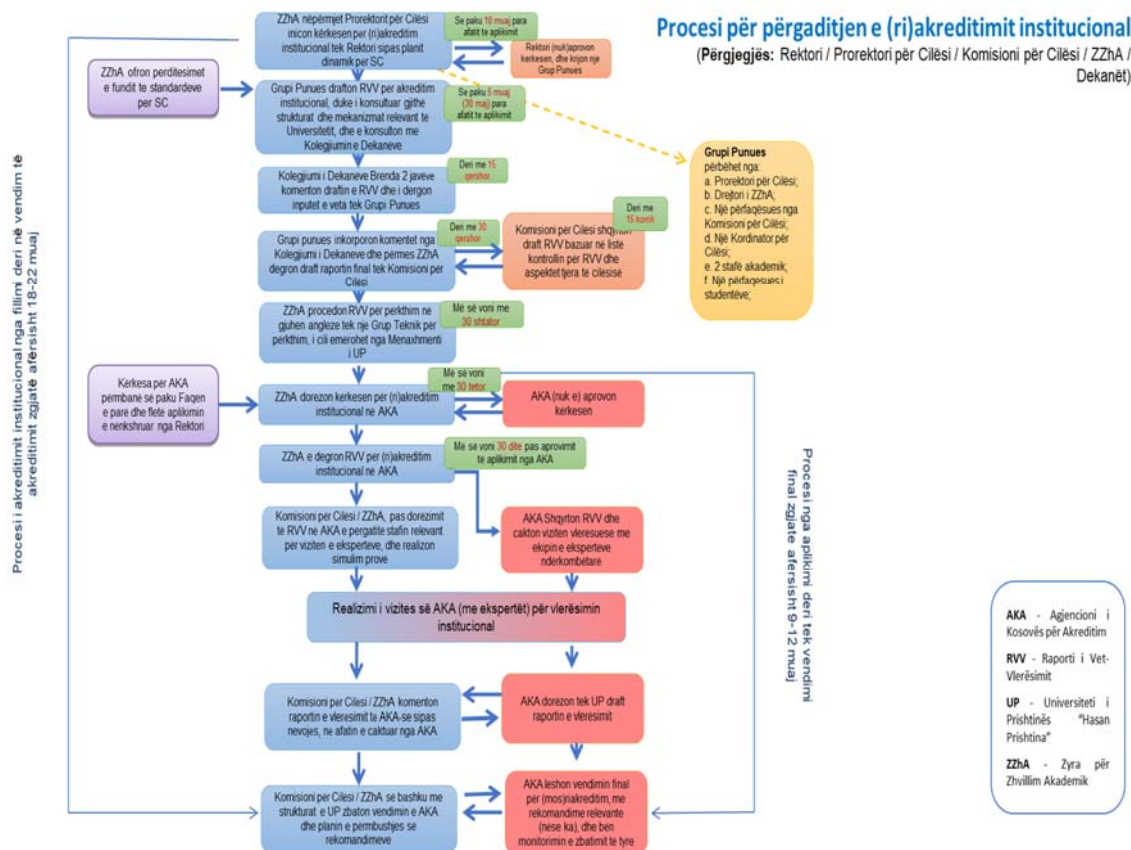
Figure 1: Quality Assurance functionality in level of University

Institutional evaluation procedures include a series of steps and procedures that are part of this process which is led by the Rector of UP. The Rector further delegates responsibilities to the working group consisting of:

- a. Pro-Rector for quality,
- b. The Director of the ADO,
- c. A representative from the Quality Council,
- d. An academic development coordinator (from AU),
- e. Two staff members,
- f. A student representative.

The organization and evaluation process for institutional accreditation and reaccreditation is not shown in Figure 2.

Figure 2: Process for preparation of institutional accreditation / re-accreditation (Responsible: Rector, Pro Rector for Quality, Quality Commission, ADO, Deans)



In the framework of quality assurance and evaluation, internal evaluation and external evaluation are developed. The basic mechanisms and instruments of quality assurance at the institutional level are: the quality assurance commission, the studies commission and the academic development office at the University level. The working group for the review of the study programme contributes to the improvement and adaptation of the curriculum of programme, namely: the management of the academic unit FCE, the coordinator for academic development, the coordinator with the holders and members of the programme relevant, alumni community, instructors, current students and alumni. The representatives of the advisory body, in fact, are the community of FCE, which enables instructors to increase the quality of the curriculum in the context of the needs of the labour market. The advisory board contributes to the development and sustainability of the programme based on market demands. External evaluation, whether or not the programme has met internationally accepted quality standards, is conducted by the Kosovo Accreditation Agency established by the Ministry of Education, Science, Technology and Innovation.

Evaluation of the academic staff is a regular process, anonymously conducted by the students through SEMS. A form of the academic staff evaluation form can be found attached in the annex (Reference sheets, A 32,4). This evaluation is done for each professor, for each subject separately and with this the final evaluation of the academic staff and the programme as a whole is achieved. The results of these questionnaires are analyzed and sent electronically to instructors, for each semester (<https://dokumente.uni-pr.edu/>), Regulation on quality assurance and quality assessment at UP, R13, Nr. 4/132 dated 30/12/2016). The Dean of the academic unit provides access to the data for the evaluations made within this regulation, based on the results, the dean drafts the improvement plans and reflects measures to be taken.

Standard 2.2. The evaluation process and planning for improvement will be continuously considered and integrated into programme planning. Achievements are celebrated, while shortcomings are improved upon and included in the implementation of future programmes.

Standard 2.3. Through teaching and learning, faculty, staff, and students are motivated to generate knowledge and develop policies, techniques, and skills to help practitioners manage both construction and environmental resources. Instructors organize lessons, exams and student assessments. Self-assessment of academic staff (scientific and professional achievements) and the subject; evaluation of the performance of the academic staff; monitoring of progress of teaching process and implementation of the curriculum (lectures, exercises, exams) by the management and discussions between the head of the department and the students, continuously promotes the quality improvement in FCE. Finally, (in November, 2021) a two-day workshop was held at UP between the management of UP and HERAS + (international experts) on the possibility of compiling and implementing a guide for measuring the performance of UP academic staff, by including performance appraisal card in four key areas relevant to UP: teaching, research, institutional development and community service. Also the evaluation of the administration staff serving the staff and the students and the financial resources and infrastructure are indicators of quality development in FCE. All these processes are included in the planning and implementation of the study programme and are supported by the central level of UP, in accordance with the regulations related to quality assurance at the University of Prishtina.

(<file:///C:/Users/Admin/Downloads/Rregullore%20e%20Vlerësimit%20të%20cilësisë%20në%20UP.pdf>, Regulation of quality assurance and quality assessment in UP, R13, Nr. 4/132 dated 30/12/2016).

Standard 2.4. An overview of quality issues concerning the programme in particular and the faculty in general. Issues include teaching and learning results and exams, colloquia, seminar papers, their interpretation and presentation, professional practice and practical tests during exercises as assessment of knowledge. These tools are used to assess how much each student has achieved the expected learning outcomes in each subject. The final assessment of students is published on the page "Transcript/Applications" in SEMS. Instructors have access to pages through a separate account. The standards of use of SEMS are defined in special regulations [R6].

At the very basic level, student assessment in the individual subject refers to the level of successful transfer of desired knowledge. At a more general level, measurements, e.g. the percentage of participation and the percentage of students passing the exams also reflect the level of achievement of the programme objectives. Achievement of course objectives in particular is assessed through the statistical report which is also available on the page "Transcript/Applications" in SEMS. The one-year student possibility statistical report for all FCE programmes is provided to instructors through a unique and single account, by FCE management. The FCE management describes achievements and shortcomings in the implementation of the programme. With the working group it also assesses and suggests activities for quality improvement planning at the faculty level.

Standard 2.5. Faculty of Civil Engineering continuously commits to quality evaluation in the programme to remain a satisfactory level and ensure that required standards are met. Another unit of quality that can be counted is the fact that students from the BSc programme immediately continued their studies upon completion of their degree by pursuing master studies even at the international level in the next cycle.

Standard 2.6. The data provided by the student assessment survey for courses, instructors and administration found in the Guide for student assessment of courses and the use of their results [U3], leads to continuous self-improvement by instructors in particular and the study programme as a whole, as well as FCE in general. Both students and Alumni comments are considered as an important instrument in the programme performance. Data on instructor achievement are published on the official FCE website.

In addition, an indicator of quality is the number of graduates on time and that this number is generated by the FCE administration. At the UP level and at the FCE level, the alumni community [T6] has been established to play a key role implementing and disseminating the knowledge they have gained during their bachelor, master or doctoral studies.

Standard 2.7. The results of assessment processes that make up the internal quality assurance system in relation to students are taken into account to ensure consistent quality. These course results particularly take into account student attendance, student assessment, colloqui, laboratory work, fieldwork, homework and final exam. Evaluation of professional skills students acquire during their studies, is in the form of diploma thesis. In the BSc programme, the integration of practical work with students during the studies (as a separate subject in the programme curriculum) in the diploma topic is often applied. The development of practical work has resulted in contacts between the student and the institution, public or private or companies (often supported by representatives of companies within the FCE advisory body), enabling the employment of graduate students in these institutions. Cooperation with the industrial board is a key element to prepare students for the labour market and securing their employment.

Standard 2.8. Continuous improvement at the programme level (every three years) occurs based on the recommendations of external experts for programme evaluation. The whole system for external quality assurance is regulated by an Administrative Instruction issued by the Ministry of Education, Science, Technology and Innovation on Accreditation of Higher Education Institutions in the Republic of Kosovo [U2]. The evaluation report on the overall quality of the programme is prepared periodically for review within the FCE, highlighting both the achievements and shortcomings of the programme.

Standard 2.9. Whenever necessary, the quality of the programme is regularly improved. Related processes takes into account all evaluations for specific quality system processes, including recommendations from external experts selected by the KAA, after the application of all regulations and guidelines related to quality assurance at the UP level for self-assessment and after the application of all regulations and guidelines related to quality assurance at the level of MESTI for external evaluation. Periodically (for the validity period of the accredited programme), the FCE prepares self-evaluation reports taking into account all processes, instruments and mechanisms with an impact on the performance and the most sustainable implementation of each programme within the FCE.

Performance indicator 2.1. All reports detailing results of evaluations are provided to the programme administrators who deliver each subject. These reports include detailed data for each course which helps the programme administrators and the Dean of the Academic Unit to undertake planned strategies for the continuous advancement of the programme. Also, collaboration with employers offers information on progress toward programme objectives.

Performance indicator 2.2. Upon completion of each course, students make the assessment anonymously through the SEMS (Student Management Programme). This evaluation, in addition to the evaluation of the instructor, includes an assessment of the subject. These assessments then help to generate reports that indicate the achievements or shortcomings of each subject. Reports are submitted to programme providers who can plan strategies to overcome any shortcomings. In these reports by the quality office, the curricula of each course is constantly evaluated and re-evaluated and the necessary recommendations for increasing the quality of the programme and performance are issued.

Performance indicator 2.4. The quality office within the Faculty of Civil Engineering evaluates and reports on the status of the programme on an annually basis. The evaluation includes all stakeholders including the academic and administrative staff of the Faculty. As needed, external experts and representatives of the business community through the Industrial Board which is very active in FCE, will participate. This also serves as a basis for programme review, with the help of professionals in all fields.

SWOT analysis for quality management:

A. Strengths:

- Monitoring the teaching process through SEMS (student's electronic monitoring system),
- Monitoring the quality and safety of student services through reporting and communication with students,
- Prompt services and quality assurance guaranteed for instructors and students,
- Managing and monitoring the quality of teaching and learning through periodic reporting and evaluation.
- Satisfactory administration services for the needs of the academic unit by using SEMS.

B. Weaknesses:

- There are no weaknesses in quality management.

C. Opportunities:

- Administrative capacity building and their training for international practices of administrative work,
- Continuous improvement of teaching, lecture attendance, exercises of students,
- Monitoring through SEMS.

D. Threats:

- Promotion of existing academic staff and the recruitment of new members,
- Eventual budget cuts for new staff can affect quality management.

2.3 Academic staff

Academic staff and academic leaders in the MSc in IWRM programme are engaged and contribute to teaching, research, development and quality assurance services at the Hydrotechnical Department, Faculty of Civil Engineering. They also provide student counselling, student support and administrative teaching assignments.

Standard 3.1. The academic staff engaged in the MSc in IWRM programme conducts its activity in full compliance with the statutory provisions of UP. The academic staff consists of the following groups of academics:

- Full time academic staff, from (UP)
- Part time academic staff, engaged from other universities.

The data on the academic staff engaged in MSc in IWRM programme, their names, academic unit, scientific degree, academic title, contract, teaching hours, ECTS, CV (CV- of the academic staff can be found in the appendix of this SER) and research activity are presented in the following table. These data as well as a detailed research activity of the academic staff, can also be found at the following link: <https://fn.uni-pr.edu/page.aspx?id=1,14>.

Table 5. Academic staff engaged in the IWRM Master's programme

No.	Academic staff	Academic Unit - Faculty University	Scientific degree	Academic title	Contract Duration ²	ECTS	Teaching hours		Research ³
	Name and Surname						M	E	
Regular Academic Staff									
1	Naser Kabashi	FCE-UP	Dr. Sc.	Prof. Dr.	No limit	3		2	CV
2	Laura Kusari	FCE-UP	Dr. Sc.	Prof. Dr.	No limit	9	2	2	CV
3	Perparim Ameti	FCE-UP	Dr. Sc.	Prof. Assoc. Dr.	2022	6	2		CV
4	Figene Ahmedi	FCE-UP	Dr. Sc.	Prof. Assoc. Dr.	2022	9	2	2	CV
5	Lavdim Osmanaj	FCE-UP	Dr. Sc.	Prof. Ass. Dr.	2025	15	4	2	CV
6	Milot Muhaxheri	FCE-UP	Dr. Sc.	Prof. Ass. Dr.	2025	3		2	CV
7	Ferdije Zhushi Etemi	FMNS-UP	Dr. Sc.	Prof. Dr.	No limit	6	2		CV
8	Halil Ibrahim	FMNS-UP	Dr. Sc.	Prof. Dr.	No limit	6	2		CV
9	Mimoza Hyseni Spahiu	FMTHE-UHZ	Dr.Sc.	Prof. Assoc. Dr.	2024	3	2		CV
10	Arben Mehmeti	FAV-UP	Dr. sc.	Prof. Dr.	No limit	3	2		CV
11	Visar Morina	LF-UP	Dr. Sc.	Prof.Dr.	No limit	3	2		CV
12	Naim Jerliu	FM-UP	Dr.Sc.	Prof. Ass. Dr.	2022	3		2	CV
13	Linda Gusia	FPh- UP	Dr.Sc.	Ass.	2023	6	2		CV
14	Mjellma Carabregu	FE-UP	Dr.Sc.	Prof.ass.	2025	3		2	CV

	Vokshi			Dr.					
15	Zijadin Guri	FCE	Dr.Sc.	Prof.Ass. Dr	2022	3		2	CV
16	Arban Berisha	FCE-UP	Dr.Sc.	Ass.	2024	6	2		CV
17	Hana Shehu Agani	FCE-UP	MSc.	Ass.	2023	9	2	2	CV
18	Premton Thaqi	FCE-UP	MSc.	Ass.	2024	9	2	2	CV
19	Venera Hajdari	FCE-UP	MSc.	Ass.	2024	9	2	2	CV
Visiting Profesor/assistant									
1	Lars Ribbe	ITT-TH Köln	Dr. rer.nat	Prof. Dr		6	2		CV
2	Sudeh Denhavi	ITT-TH Köln	Dr.	Research Associate		6	2		CV

1. FCE - Faculty of Civil Engineering; FMNS - Faculty of Mathematical - Natural Sciences; FAV - Faculty of Agriculture and Veterinary; LF- Law Faculty; FMTHE- UHZ - Faculty of Management in Tourism, Hospitality and Environment, FM - Faculty of Medicine; FPh- Faculty of Philosophy; UP- University of Prishtina “Hasan Prishtina”; UHZ- University Haxhi Zeka, Peje; FE- Faculty of Economics.
2. TH-Cologne-Technical Faculty of Cologne, Germany (Technische Hochschule Köln/Institute for Technology and Resources Management in the Tropics and Sub-tropics).
3. RC - Regular contract; PC - Part time contract; VP - Visiting Professor
4. CV - biography of each academic staff (link: <https://fn.uni-pr.edu/page.aspx?id=1,14> for CV of each academic staff)

Standard 3.2. In the context of the employment contract procedure, each member of the academic staff follows a procedure regulated by the status of UP [S1] as well as regulations at the Institutional level [R2, R3]. The academic unit, namely the faculty, submits the request to the UP Senate for the needs of the academic and administrative staff before the beginning of the academic year. Upon approval of the request by the Senate, the hiring procedures are established in accordance with the Status of UP [Error! Reference source not found.] and regulations [R2, R3] until the finalization of the contract [A14, A15, A16]. Competitions for full-time academic staff, specifically competitions for academic promotion are organized up to the level of UP, that is the the Senate. The procedures are described in the Regulation related to the appointment, reappointment and promotion of academic staff UP 2019 [R2, R3]. According to the regulations, the academic unit carries out the evaluation reports based on merits and standards set according to the statute of UP [S1], the same are approved by the council of the academic unit and are processed until their final approval by the UP Senate. After approval, the employment contract is signed [A14, A15, A16]. The University of Prishtina issues: regular contract (RC) (4 years for professors and 3 years for assistants) for academic staff in full-time employment and part-time contract (PTC) (depending on the demands of the faculty, which has a duration of 1 year) for engaged academic staff. All staff members, regardless of the type of contract, meets the legal criteria for the respective positions and are in accordance with the provisions of Administrative Instruction No. 15/2018 on Accreditation of Higher Education Institutions by MESTI, Article 26, point 5.3 [U1].

Standard 3.3. The academic staff engaged in the MSc IWRM programme is full-time, working only in a higher education institution. This means that FCE in the MSc IWRM programme has engaged academic staff selected in accordance with the provisions of the Administrative Instruction of the Ministry of Education, Science, Technology and Innovation of 2018, Article 26, points 5.3.14 and 5.3.15 [U1].

Standard 3.4. The MSc IWRM programme has in total 21 instructors. From this number, 18 instructors (13 professors and 5 assistants) are from UP, 1 professor from UHZ and 2 visiting professors from International Universities. According to academic titles, the programme counts six Full Professors (Dr.

Sc. Prof.); three Associate Professors (Dr. Sc. Prof. Assoc.); four Assistant Professors (Dr. Sc. Prof. Ass.); and six Teaching Assistants (Ass.), from which two PhD holder assistant (soon to be promoted to Prof. assist.). To the total number of professors is one visiting professor from the Technische Hochschule Köln/Institute for Technology and Resources Management in the Tropics and Sub-tropics University of Köln and a researcher from the same University. These professors have their academic degrees prof. dr. and asoc researcher, and their statistics are not included above.

As we can notice, out of 21 instructors, 19 are full staff (from UP and UHZ) that counts for about 90.5% of professors are full time employees. As for the total 23 classes of this MSc, all 20 classes, about 86% of classes are conducted by full time employees.

Standard 3.5. The Hydrotechnical Department of the Faculty of Civil Engineering, within which the MSc IWRM study programme is implemented, has provided sufficient full-time staff with the Doctorates academic title (PhD). Two PhD academics (one full time professor and one assistant professor) that are holders of the MSc IWRM programme. The recruitment of new academic staff takes place based on the requirements of the faculty and of course at the time when UP announces a call for new academic staff.

Standard 3.6. Academic staff engaged in the MSc IWRM study programme is trained in teaching methods as well as student learning assessment practices. Academic staff training is conducted on an individual basis for certification. Some instructors engaged in MSc IWRM programme are certified by the Programme "Development of critical thinking during reading and teaching" of the International Association of Reading in Washington DC. This training was organized in 2001-2002, by the Centre for Education in Kosovo (CEK) on main training topic "Main teaching strategy". Other trainings organized by the Centre for Excellence in Teaching of UP [R11], such as: basic level trainings "Teaching in higher education", and advanced level trainings "Planning and implementation of teaching in higher education". The invitation to these trainings was for all full-time academic staff with permission to apply. The promotion of the academic staff also requires the fulfillment of the criterion of training in teaching (see "Forms of the Evaluation Commission for the Appointment of Academic Staff, for Employment Relations in the Higher Education Institution") [R2, R3]. Also, the staff is encouraged to participate in scientific projects, to compete for scholarships for academic mobility of instructors with universities abroad. SKAT (IWRM-K project) and Erasmus + funds for international cooperation help organise lectures as well as conferences, workshops and trainings related to the purpose of the projects. They aim to provide experiential benefits and models of good practices with an impact on professional and academic development.

Standard 3.7. According to the provisions of the employment contract and in accordance with the policies of the FCE, the academic staff, lecturers and instructors are available for the consultations with students. The instructors provides the students with the text, basic teaching literature, instructions for seminar papers, as well as other forms used for teaching and learning within the subject. Other literature is offered as additional literature by the instructor, for students who express interest in more detailed study during studies in the field of interest, or for life-long learning. Also, each instructor is available on an ongoing basis to provide advice and expertise related to the instructor's areas of interest for community needs.

Standards 3.8. The academic staff of the MSc IWRM programme, as well as all FCE staff, are subject to self-assessment and questionnaires by the academic staff (as required to be defined in the Forms of the Evaluation Committee for the Appointment of Academic Staff, for employment in the Higher Education Institution) [R2]. These include the evaluation of educational activities (teaching, organization of study visits, invitation of visiting lecturers, literature and mechanisms for the proper assessment of students), research, scientific and professional activities (publications in scientific journals with international reviews, participation in scientific conferences, participation in research projects, scientific and

professional, reviews in academic and professional journals) as well as service activities for UP, FCE and for the community (tasks assigned by the level of UP, FCE, or on a voluntary basis).

The evaluation of the academic staff is a regular process done by the students through SEMS anonymously. This evaluation is done for each professor leading to the final evaluation of the academic staff as a whole. A form of the questionnaire is attached to the annex (A.32.1). The results of these questionnaires are analyzed and sent electronically to instructors, for each semester (Quality Assurance Regulation, R13, No. 4/132 dated 30/12/2016). The questionnaire, formulated by the UP office for quality, is completed anonymously by students. They are used to evaluate academic staff and the subject matter, at the same time. The administrative staff of UP [U3] is also evaluated. In these questionnaires the students have the opportunity to give their assessment for each subject, including the evaluation of the instructor engaged in that subject. An overview of the performance of the academic staff helps monitor of the progress of the teaching process (lectures, exercises, exams) and learning outcomes (compared to the course syllabus) developed by the management of FN and the head of the department. Student learning progress, passability and classroom participation are also assessed through the electronic student management system (SEMS).

Standard 3.9. The quality assurance and quality enhancements of the MSc in IWRM programme will be achieved by the regular evaluation of the academic staff, as described in standards 2.3 and 2.6 and 3.8. Providing appropriate teaching materials, such as primary literature and additional literature to gain knowledge for students and update the course content helps assure the quality of this programme. The syllabusi will be published online on the FCE website and will be updated regularly with the new modules and literature. Another quality assurance strategy through teaching and learning materials is the use of mobility by FCE academic staff, through SKAT-IWRM-K programme cooperation with other Universities, through EU programmes "Erasmus +" contributing to teaching reform (teaching, curriculum and literature). In this regard, the help of University of Koln is of an utmost importance, especially in preparing the course's syllabi.

Standard 3.10. The working status of the instructors at retirement age (as well as the status of regular staff and engaged staff) is regulated by the UP Statute, specifically Articles 169 and 170 on University Employees - Academic and non-academic staff [S1], the Regulation on selection procedures of academic staff at UP [R2] and Regulation on the engagement of external collaborators at UP [R3]. According to the provisions of UP, the regular staff member is an instructor who does not have any other full-time employment contract in any other university [R3]. The retired academic staff are considered instructor over 65 years old and can be engaged up to 70 years old, through the part time contracts.

For this category of instructors, the faculty council [R2] issues the decision for engagement for the following academic year.

SWOT analysis for academic staff:

A. Strengths:

- Highly qualified instructors.
- Professors with academic expertise.
- Professors with different educational background and professional work expertise.
- Inclusion of academic staff from different academic units.
- Instructors trained in teaching methods as well as student learning assessment practices.

B. Weaknesses:

- No weaknesses for this period regarding the academic staff.

C. Opportunities:

- Gains from cooperation with expert colleagues with different professional and educational background;
- Continuous professional and scientific development through cooperation with industry.
- Increase in performance for specific water resources management areas, according to the demands of internal and external market.
- A good placement of the established professional framework due to the labour market extension, flexibility and the opening of borders.

D. Threats:

- Providing institutional - financial support for the academic development and research activity of the teaching staff.
- The strict criteria for academic staff promotion.

2.4 Content of the educational process

Standard 4.1 The Master's Programme in IWRM aims to educate and develop needed qualified personnel who will be responsible for optimal planning, design, operation and management of the water resources systems. The educated personnel in this area will be responsible for creating the best possible solutions for water resources problems while considering the environmental criteria. To address all these challenges and to provide solutions, the Master's Programme in IWRM offers an interdisciplinary and integrated approach, to deliver the needed capacity building in this field. The MP in IWRM programme is designed to equip different groups of water related professionals in different areas of water management with cutting-edge knowledge of the IWRM principles, processes and practices. Dissemination of this new knowledge amongst new professionals is expected to catalyse the transformation of current water management into a modern water governance system able to bring forward the country's sustainability agenda. In this way, the next generation of water management professionals will be much better equipped with contemporary knowledge and skills to manage real world water resources management challenges and uncertainties. This programme will help Kosovo improve its overall water resources management by shifting away traditional approaches to contemporary holistic concepts, that integrate different scientific disciplines.

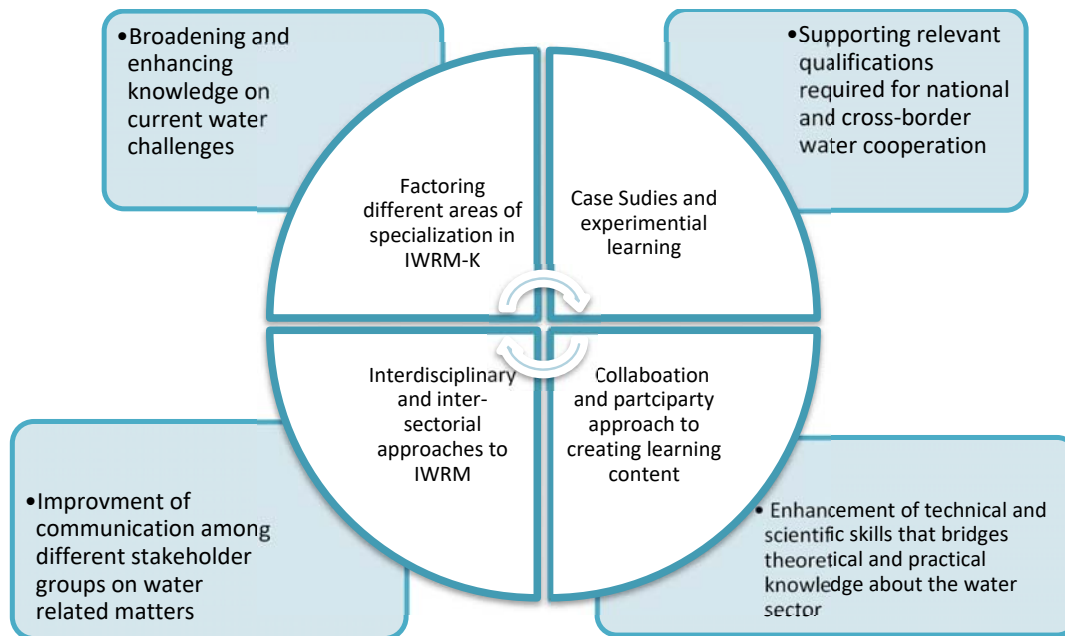
Standard 4.2. The MSc IWRM study programme aligns with the National Qualifications Framework [K1] and the European Higher Education Qualifications Framework [K2]. This means that the MSc in IWRM programme belongs to the seventh (7) level of qualifications with two years of full-time study. While designing the curricula for IWRM Master programme we considered international curricula such a one-year Master of Science in Integrated Water Resources Management (Non-Thesis) programme offered by the Department of Bioresource Engineering, at McGill University, Canada. This course content offers physical, environmental, legal, institutional, and socio-economic aspects of water use and management in an integrated context, as well as technical dimensions, which are accounted for in outlined solutions for management and development of water resources.

Another IWRM Master programme analysed was the Master of Science in Water Science, Policy and Management offered by Oxford University, which aims to equip the next generation of water professionals with the blend of skills necessary to make significant contribution to sustainable water management pathways across competing priorities of water for ecosystems, food, energy, economic growth, and human consumption. Similarly, the two-year master's programme in Water Science and Management at Utrecht University in the Netherlands trains students to be water professionals with both an understanding of the technical aspects of water management and the ability to implement this knowledge for societal needs; to view water management considering sustainable development, societal costs, and benefits.

The MSc in IWRM study programme in Kosovo is comparable to the Integrated Water Resources Management Master Programme of the Cologne University of Applied Sciences (TH Köln) (<http://curriculum.itt.th-koeln.de/wordpress/itt-curriculum/integrated-water-resources-management-iwrm/>) Technical and to the Master of Science on The Water Resources and Environmental Management offered by Leibniz University, Hanover, Germany (<https://www.uni-hannover.de/en/studium/studiengangebot/info/studiengang/detail/water-resources-and-environmental-management/>). By designing this programme, we have taken into account the challenges in water sector and specific needs in the Water Resources Management in Kosovo.

The main goal of this Master Programme in IWRM is to create a community of water experts that are able to address interlinked challenges in the water sector and strengthen the management of water resources. The main objectives of the Master programme in IWRM are shown in the following figure.

Figure 3. Key objectives of the MSc IWRM programme



Standard 4.3. The MP in IWRM is focused on education reforms in the country since most current programmes on water education are leaning toward engineering, biophysical, ecological and hydrological perspective. Therefore, this programme is designed based on 3 main points:

- Synergistic agenda that creates a workforce with skills matching the job markets in the public and private water sector, while creating professionals knowledgeable in sustainability related targets.
- Customised approach by implementing tailor made educational programme based on specific threats and challenges in the Kosovo water sector as well as opportunities for sustainable development of the water sector.
- Interdisciplinary approach by addressing multiple technical challenges through the integration of the different courses on water resources management such as hydrology, water engineering, water law, economics of water and social sciences etc.

The Master’s programme in IWRM curricula combines a set of basic modules on water resources such as “Introduction: IWRM and Water Security”, “Hydrology and Hydrometry”, “Water Conservation and Water Efficiency”, “Flood and Drought Management”, “Hydraulic Structures” and “Environmental Monitoring and Data Analyses”. This programme offers courses from Natural sciences such as “Biophysical Characterization of Water” and “Ecosystem based Management”. In order to provide an overview on water economics and legislation the following modules are designed, “Economics of Water and Financial Instruments for Implementation of IWRM”, “Water Legislation and Governance”. The course in the field of informatics is of an utmost importance when dealing with large data, their processing and analyses for IWRM, therefore the course “Geospatial Tools for the IWRM Implementation is part of the curricula.

In addition, participants can select among 9 elective courses related to integrated water resources management such as: “Research Methods and Study Design”, “Project Management”, “Public Health” and “Entrepreneurship” etc. Internship and research work will focus on the master’s thesis preparation, if possible, with the local or regional institution or companies. This will contribute to the practical orientation of the master research.

Table 5 Organization of courses by categories.

Discipline / Field	Formative activity	ECTS		
		ECTS	Total	%
Fundamental water resources courses	Introduction: IWRM and Water Security	6	33	27.5%
	Hydrology and Hydrometry	6		
	Water Conservation and Water Efficiency	6		
	Flood and Drought Management	3		
	Hydraulic Structures	6		
	Environmental Monitoring and Data Analyses	6		
Natural Sciences related courses	Biophysical Characterisation of Water	6	9	7.5%
	Ecosystem Based Management	6		
Economy and Legislation	Economics of Water and Financial Instruments for Implementation of IWRM	6	6	5%
	Water Legislation and Governance	3		
Informatics	Geospatial Tools for IWRM Implementation	6	12	10%
Social and other	Climate Change: Risk and Resilience	6		
	Water and Conflicts-Power and Politics in the Water Sector	6		
Elective Courses	Research Methods and Study Design	3	Minimum of elective courses 18	15%
	Project Management	3		
	Meteorology	3		
	Water and Agriculture	3		
	Public Health	3		
	Sustainable Development Goals	3		
	Hydro Informatics/Hydraulic Modeling	3		
	Entrepreneurship	3		
	Watershed Management	3		
Diploma	Internship	10	30	25%
	Thesis Work	20		

The programme seeks candidates who hold at minimum a bachelor degree and may come from a variety of academic backgrounds related to the water sector, such as engineering, natural sciences, economics, social sciences. They should have preferably some working experiences at an institution or company in the water sector, have good communicative skills and be fluent in English. The candidates should be highly motivated to contribute to solving the water crisis and should aspire to make a career in the international water sector. The MSc in IWRM is designed as a master's degree programme oriented as an empirical learning programme, to provide the students needed knowledge on the water sector in EU region and improve their scientific and technical skills about water resources management. This will be achieved through full time studies, spread over 2 years (i.e., 4 semesters). During the master studies

students gain in total 120 ECTS, each semester has 30 ECTS. During the first three semesters' students will gain 90 ECT while the fourth semester is dedicated to internship and Diploma theses. Internship enables students to broaden and enhance knowledge on current water challenges, widen their theoretical knowledge and apply that knowledge on the real time problems on the water sector. Also, it helps improve communication skills and improve communication among different stakeholder groups on water related matters. Through this internship students gain additional 10 ECTS. Some of the Institutions and companies that are available for cooperation and student internship are:

- University of Cologne, Institute for Technology and Resource Management in tropical and sub-tropical regions,
- Ministry of Environment and Spatial Planning (MESP)- River Basin District Authority,
- Ministry of Environment and Spatial Planning (MESP)- Kosovo Environmental Protection Agency (KEPA),
- Ministry of Environment and Spatial Planning (MESP)- Environmental Department (ED),
- Ministry of Environment and Spatial Planning (MESP)- Hydro-Meteorological Institute of Kosovo (HMIK),
- Regional Water Company "Prishtina", Prishtina,
- Regional Water Company "HidroDrini", Peje,
- Irrigation Provider Companies (IPs), etc.

Besides the internship, the fourth semester of Master's studies is dedicated for researching and writing the Master thesis, from which students gain an additional 20 ECTS. The Master's theses finalisation leads to the Master of Science in IWRM degree.

To support the Master's Programme, through field visits, internship, research for master's theses, the Faculty of Civil Engineering and University of Prishtina have signed cooperation agreements that will provide mutual benefits, for institutions, companies and students. Some of these agreements are:

- Memorandum of understanding between Technische Hochschule Köln, Faculty of Spatial, Development and Infrastructure Systems and University of Prishtina "Hasan Prishtina",
- Memorandum of Understanding between Faculty of Civil Engineering, University of Prishtina "Hasan Prishtina" and Faculty of Environmental and Mechanical Engineering, Poznan University of Life Sciences, Poland,
- Erasmus + Programme, Inter institutional agreement 2022-2024 between Universitat fur Bodenkultur Wien (University of Natural Resources and Life Sciences, Vienna and University of Prishtina "Hasan Prishtina", Prishtina,
- Erasmus + Programme, Inter institutional agreement 2020-2023 between University of Trento, Italy and and University of Prishtina "Hasan Prishtina", Prishtina,
- Memorandum of cooperation between the Ministry of Culture, Youth and Sports and the University of Prishtina "Hasan Prishtina", Faculty of Civil Engineering regarding the assessment of the physical condition of damaged buildings within the memorial complex "Adem Jashari" in Prekaz, June 28, 2021.
- Cooperation Agreement between the University of Prishtina, specifically between the Faculty of Civil Engineering and the Regional Water Company (RWC) "Prishtina".
- Memorandum of understanding and cooperation between the Faculty of Civil Engineering and Architecture, University of Prishtina, and the Institute "INKOS" JSC, January 8, 2019, etc. [T3].

These agreements, among many others are located in the section on Cooperation Agreements in FCE [T3]. As for the internship and diploma thesis of the MSc in IWRM students, the IWRM-K programme signed an agreement with the TH Köln [T15] to support the Academic Partnership that offers internship

for students as well as co-mentoring and supervising students on concluding their research work (Diploma Thesis). The programme curricula for the Master Programme in IWRM, with courses distributed over the semesters is described in the following table.

Table 6. Overview of the Master programme on IWRM

Year I						
First Semester I			Hours/ Week			
No.	M/E	Subject	L	E	ECTS	Professor
1	M	Introduction: IWRM and Water Security	2	1	6	Prof. Ass. Dr. Lavdim Osmanaj
2	M	Hydrology and Hydrometry	2	2	6	Prof. Ass. Dr. Lavdim Osmanaj
3	M	Water Economics and Financial Instruments for the Implementation of IWRM	2	2	6	Prof. Dr. Lars Ribbe/ Dr. Sudeh Dehnavi
4	M	Biophysical Characterization of Water	2	2	6	Prof. Assoc. Dr. Halil Ibrahim
5	E	Research Methods and Study Design	2	0	3	Prof. Dr. Naser Kabashi
6	E	Project Management	2	0	3	Prof.ass.Dr. Sc. Zijadin Guri
7	E	Meteorology	2	0	3	Prof. Ass. Dr. Milot Muhaxheri
<i>In the first semester the student achieves 24 ECTS from the compulsory courses and must choose 6 ECTS from the elective courses (chooses 2 out of 3 elective courses).</i>						
Second Semester II			Hours/ Week			
No.	M/E	Subject	L	E	ECTS	Professor
1	M	Water Conservation and Water Efficiency	2	2	6	Prof. Assoc.Dr. Figene Ahmedi
2	M	Environmental Monitoring and Data Analysis	2	2	6	Prof. Assoc. Dr. Mimoza Hyseni Spahiu
3	M	Water Legislation & Governance	2	0	3	Prof. Dr. Visar Morina
4	M	Flood and Drought Management	2	0	3	Prof. Dr. Laura Kusari
5	M	Climate Change: Risk and Resilience	2	1	6	Prof. Dr. Lars Ribbe/ Dr. Sudeh Dehnavi
6	E	Water and Agriculture	2	0	3	Prof. Dr. Arben Mehmeti
7	E	Public Health	2	0	3	Prof.Ass. Dr. Naim Jerliu
8	E	Sustainable Development Goals	2	0	3	Prof. Ass. Dr. Lavdim Osmanaj
<i>In the second semester the student reaches 24 ECTS from the compulsory courses and must choose 6 ECTS from the elective courses (chooses 2 out of 3 elective courses).</i>						
Year II						
Third Semester III			Hours/ Week			
No.	M/E	Subject	L	E	ECTS	Professor
1	M	Geospatial Tools for IWRM Implementation	2	2	6	Prof. Assoc. Dr. Përparim Ameti
2	M	Water and Conflicts-power and politics in the Water Sector	2	2	6	Prof. Ass. Dr. Linda Gusia
3	M	Ecosystem Based Management	2	2	6	Prof. Dr. Ferdije Zhushi Etemi
4	M	Hydraulic Structures	2	2	6	Prof. Dr. Laura Kusari
5	E	Hydro-Informatics/Hydraulic Modeling	1	2	3	Prof. Ass. Dr. Lavdim Osmanaj
6	E	Entrepreneurship	2	0	3	Prof. Ass. Dr. Mjellma Carabregu
7	E	Watershed Management	2	0	3	Prof. Assoc.Dr.Figene Ahmedi

In the third semester the student reaches 24 ECTS from the compulsory courses and must choose 6 ECTS from the elective courses (chooses 2 out of 3 elective courses).

Fourth Semester IV			Hours/ Week			
No.	M/E	Subject	L	E	ECTS	Professor
1	M	Internship			10	
2	M	Diploma Thesis			20	

Shourt Course description

First semester

Subject: Introduction: IWRM and Water Security

Professor: Prof. Ass. Dr. Lavdim Osmanaj

Subject Status: Mandatory, Credit value- ECTS: 6

Course Description: This course introduces all aspects of multi-disciplinary integrated water resources management and planning. They includes the comprehension of different frameworks used in water resources management with focus on key steps in the planing process such as situation analysis, objectives and criteria, scenario and strategy development, stakeholder participation and analysis and the role of modelling in water resources management and planning.

Course Goals: Explain basic concepts in water resources management and planning and describe steps in a participatory planning process; Explain how decision support systems and different models can be used as tools in water management plans; Explain how to develop and evaluate water management strategies using multiple criteria.

Expected Learning Outcomes: Describe concepts and major steps in water resources management and planning; Identify, critically analyse, and apply participatory tools and models such as decision support systems; Develop, compare, and evaluate water resources management strategies by using multi-criteria analysis.

Means of concretization: Chalk, table, projector, computer, workbook, markers, hydrological equipment.

Teaching methodology: Lectures, in class exercises using different materials, a project work in a group of 2-3 students (independent work), individual homework.

Student assessment methodology: individual assignments completed in class 30%; individual assignments completed at home 30% and exam 40%, total 100%.

Basic and supplementary literature for the course: Primary literature: Water Resource Systems Planning and Management-An Introduction to Methods, Models, and Applications. Daniel P. Loucks, EelcovanBeek. 2017. Additional literature: A handbook for Integrated Water Resources Management in Basins. GWP (2009) IWRM-Training manual and operational guide. GWP (2005).

Subject: Hydrology and Hydrometry

Instructor: Prof.Ass.Dr. Lavdim Osmanaj

Subject Status: Mandatory, Credit value - ECTS: 6

Course description: This course is designed to provide a general understanding of the processes in the hydrologic cycle and the factors that govern these processes including assessment, relation, and estimation of these factors. Moreover, it provides useful skills for using statistical methods and hydrological models to monitor, assess, and analyze spatial and temporal variability of water availability.

Course purpose: The purpose of the course is to explain the basics of the hydrological cycle, water balance and its components; Explain different methods and approaches to analyze and evaluate water balance factors; Explain different methods and approaches to conduct analyzes on the spatial and temporal scale of water resources of a basin; Explain different types of water resources data and important elements of a hydrological data monitoring network; Explain hydrological models and their use in hydrological assessment.

Expected learning outcomes: Upon completion of this course, the student will have the following knowledge, skills and competencies: key hydrological processes, water balance and its components; hydrological calculations of water balance, statistical analysis of precipitation, evaluation of evapotranspiration; spatio-temporal analysis of water resources using a range of statistical approaches; monitoring design for both the quantity and quality of water for a pond;

Means of concretization: Chalk, table, projector, computer, workbook, markers, hydrological equipment.

Teaching methodology: Lectures, in-class excersisesusing different materials, a project work in a group of 2-3 students, individual homework.

Student assessment methodology: Assessment in individual assignments 30%; Assessment in individual assignments completed at home 30% and Exam Assessment 40%, 100% in total.

Basic and Supplementary Literature for the Course: Primary Literature: CHOW, 1964, Handbook of Applied Hydrology, Mc Graw-Hill Book Company, 1964. Dahmen, E. R., & Hall, M. J. (1990). World Meteorological Organization (1994) .World Meteorological Organization. Additional literature: Ward, R.C. and M. Robinson, 1990. Principles of Hydrology, Mc Graw-Hill, 365 pp., Maidment, D.R., ed., Handbook of Hydrology, Mc Graw-Hill, 1993.

Course: Water Economics and Financial Instruments for the Implementation of Integrated Water Resources Management

Instructor: Prof. Lars Ribbe, Dr. Sudeh Dehnavi

Course status: Mandatory, Credit value- ECTS: 6

Course description: This course will provide an introduction to the biological and physical characterization of aquatic ecosystems. It will provide knowledge of biophysical techniques and tools for the biophysical characterisation of water, various approaches to IWRM implementation- watershed management, basin management as well as biophysical characterisation's analyses of case studies.

Course goals: This course aims to equip students with knowledge in water economics and to encourage the use of analytical and financial tools in decision-making for sustainable and integrated management of water resources.

Expected Learning Outcomes: Upon completion of this course, students will be able to: Define physical properties of aquatic ecosystems and their role in the overall ecosystem functioning; Define biological properties of aquatic ecosystems and their role in the overall ecosystem functioning; Analyze biophysical characterisation of water in function of the IWRM approaches and watershed management; Implement basic biophysical characterisation of certain aquatic ecosystems; Assess the needs of proper watershed management based on biophysical characterization of water; Integrate knowledge about biophysical characterization of water in the overall ecosystem functioning.

Means of concretization: Chalk, table, projector, computer, workbook, markers, hydrological equipment.

Teaching methodology: Lectures, in-class excersisesusing different materials, a group project work of 2-3 students (independent work), individual homework

Student assessment methodology: Individual assignments completed in class 30%; Individual homework 30%; 40% exam.

Basic and supplementary literature for the course: Primary Literature: 1. Handbook of Inland Aquatic Ecosystem Management, Sven Jorgansen, Jose Galizia Tundisi, Takako Matsumura Tundisi 2009, CRC Press, 427 pp. Additional Literature: 1. The Body Size: The Structure and Function of Aquatic Ecosystems, Editeb by: Alan Hildrew, Dave, Raffaelli, Ronni Edmonds Brown. Cambridge University Press 2010, 357 pp; 2. Fundamenals of Aquatic Ecology, Edited by RSK Barnes, KH Mann, Blackwell Science 2005, 271 pp.

Course: Biophysical Characterization of Water

Instructor: Prof. Assoc. Dr. Halil Ibrahimi

Course status: Mandatory, Credit value- ECTS: 6

Course description: This course provides an introduction to the biological and physical characterization of aquatic ecosystems. It provides knowledge of the analyses of biophysical techniques and tools for the biophysical characterisation of water, various approaches to IWRM implementation- watershed management and basin management as well as biophysical characterisation's analyses of case studies.

Course goals: To understand patterns of physical and biological characteristics of aquatic ecosystems, process the knowledge on predicting and managing the abundance and diversity, biogeography, interactions in food webs and the associated impact on them.

Expected Learning Outcomes: Upon completion of this course, students will be able to: Define physical properties of aquatic ecosystems and their role in the overall ecosystem functioning; Define biological properties of aquatic ecosystems and their role in the overall ecosystem functioning; Analyze biophysical characterisation of water using IWRM approaches and watershed management techniques; Implement basic biophysical characterisation of certain aquatic ecosystems; Assess the needs for proper watershed management based on biophysical characterization of water; Integrate knowledge about biophysical characterization of water in the overall ecosystem functioning.

Means of concretization: The following tools will be used during the lectures: table, computer, projector; The laboratory will use microscopes, alcohol as a preservative, tweezers, tweezers and field sampling nets, plastic plates, glass jars, tweezers, etc.

Teaching methodology: Lectures, in-class exercises using different materials, a group project work of 2-3 students (independent work), individual homework

Student assessment methodology: All student activities will be continuously evaluated. The evaluation will include interim and final evaluation; Intermediary rating 50%; homework and other commitments 10%; attendance 10%; Final exam 30%, total 100%.

Basic and supplementary literature for the course: Handbook of Inland Aquatic Ecosystem Management, Sven Jorgansen, Jose Galizia Tundisi, Takako Matsumura Tundisi 2009, CRC Press, 427 pp. Additional Literature: The Body Size: The Structure and Function of Aquatic Ecosystems, Edited by: Alan Hildrew, Dave, Raffaelli, Ronni Edmonds Brown.

Course: Project Management

Instructor: Prof.ass.Dr. Sc. Zijadin GURI

Course status: Elective, Credit value- ECTS: 3

Course description: Familiarity with the main principles of project management in civil engineering and the feasibility of engineering projects group formations and initiatives of construction projects. Planning in construction projects, and quality control as well as the necessary skills that an Engineer must have to be a construction project manager.

Course goals: Knowledge and understanding of the correct use of basic concepts of project management in civil engineering in general, as well as the main principles of work organization and management in projects in particular.

Expected Learning Outcomes: Upon completion of the course the student will be able to know, understand and use correctly the basic notions of management, as well as the main principles of organization and management of work in projects in particular, in order to more easily cope with difficulties that await him during and after these studies.

Means of concretization: During lecture: Table, projector, computer.

Teaching methodology: Lectures, exercises, and seminar work.

Student assessment methodology: Individual seminars and final exam assessment for solved tasks and theoretical answers.

Basic and supplementary literature for the course: Civil Engineering Project Management, A. C Twort and Gordon Rees. Additional Literature: Total Construction Project Management, George J. Ritz, 2013.

Course: Meteorology

Instructor: Prof. Ass.Dr. Milot Muhaxheri

Course status: Elective, Credit value- ECTS: 3

Course description: A brief history of metrology, essentials of meteorology, atmospheric vertical structure, layers and gases. Atmosphere thermodynamics. Sun and earth radiation. The rain. Meteorological observations and forecasts. Air pollution. Climate change and global warming, Meteorological Instrumentation

Course goals: The aim of this course is to provide the student with basic knowledge in the field of meteorology, as well as to understand the parameters that affect air pollution, climate change and global warming and meteorological instrumentation.

Expected Learning Outcomes: Upon completion of this course students will be able to: describe the structure of the atmosphere and how meteorological parameters change (temperature, air pressure, humidity) in time and space; the global circulation of the atmosphere, frontal systems and atmospheric movements; the Earth's climate and the factors that affect it; meteorological observations methods and their application; importance of climate change and the process of global warming; as well as distinguish the instruments used in the field of metrology

Means of concretization: During lectures: Table, projector, computer and meteorological instruments.

Teaching methodology: Lectures with presentations, Semester seminar with concrete tasks, Discussions during lectures; Group exercises.

Student assessment methodology: Written exam 50%; oral exam 50%. The oral part also includes presentations.

Basic and supplementary literature for the course: Primary Literature: Meteorology Today, Donald Ahrens, 2009 Meteorologjia, Milosavlevic, M 1980 Prishtinë (albanian translation).

Additional Literature: Practical Meteorology, Roland Stull 2015; State of Global Climate, WMO Instructor's Handbook on Meteorological Instrumentation, Fred Brock 1984.

Course: Research Methodology and Study Design

Instructor: Prof.Dr.Naser Kabashi

Course status: Elective, Credit value- ECTS: 3

Course description: The main purpose of the Research Methods, Data Analyses, and Reporting to Support DoD Security Programmes course is to introduce students to quantitative and qualitative methods for conducting meaningful inquiry and research. They will gain an overview of research intent and design, methodology and technique, format and presentation, and data management and analysis informed by commonly used statistical methods. The course will develop each student's ability to use this knowledge more effectively.

Course goals: Research methods in: Water quantity, Water quality, Impacts of water use, Water resource protection or remediation, Improved understanding of the resource, Responding to a resource crisis

Expected Learning Outcomes: This course is designed to enable students to meet the following final terminal learning objectives: Act as an educated consumer of data; Prepare a preliminary research design for projects in their subject matter areas; Accurately collect, analyze and report data; Present complex data or situations clearly; Review and analyze research findings that affect their agency.

Means of concretization: During lectures: Table, projector, computer.

Teaching methodology: Lectures, in class exercises using different materials, one project in group of 2-3 students (independent work), individual homework

Student assessment methodology: Individual in-class assignments 30%; Individual take-home assignments 30%; Exam 40%.

Basic and supplementary literature for the course: Primary Literature: N.Kabashi; Metodologjia Humlumtuese ne Inxhinieri, USHT, 2006; Research Methodology – C.R.Kothari; Additional Literature: Geoffrey D. Gooch (Editor), Alistair Rieu-Clarke (Editor), Per Stalnacke (Editor); Integrating Water Resources Management: Interdisciplinary Methodologies and Strategies in Practice (European Commission Community Research)

Second Semester

Course: Water Legislation & Governance

Instructor: Prof.Dr. Visar Morina

Course status: Mandatory, Credit value- ECTS: 3

Course description: Basics of water policy and legislations, historical overview and key terms, State interventions and water as an economic and human right. The water law curriculum includes a course specializing in the legal principles involved in securing, allocating, transferring, managing and adjudicating water rights for public and private uses. The primary emphasis is on current legal and policy issues, but the course also addresses significant aspects of the historical development of water policy and water law in Kosovo.

Course goals: To understand public rights in water resources, allocation and protection of groundwater resources.

Expected Learning Outcomes: Upon completion of this course, students will be able to: Explain concepts/frameworks of inter(national) water and environmental law and policy; how they influence inter(national) and local decision-making and vice-versa with respect to conflicts regarding natural resources use, allocation, distribution and governance; Analyse inter-national, regional and local water and environmental problems and how law, policies, politics, institutional arrangements, principles and instruments can be used to address these water and environmental justice and sustainability problems; Apply analytical academic skills acquired to analyse interrelations between various water and environmental issues.

Means of concretization: During the lectures: table, computer, projector;

Teaching methodology: Lectures, exercises during class using different materials, one group project work in group of 2-3 students (independent work), individual homework

Student assessment methodology: Individual homework performed 30%; Individual homework 30%; 40% exam.

Basic and supplementary literature for the course: Veselaj, Zeqir. "Principles of Sustainable Development as Norms of the Current Legislative Framework in Kosovo." *European Journal of Sustainable Development Research* 3.4 (2019): em0099. Goldfarb, William. *Water law*. CRC Press, 2020. Law no. 04/l-147 on waters of Kosovo; Kosovo Strategy for Waters 2021 - 2036

Additional Literature: Rieu-Clarke, Alistair, Andrew Allan, and Sarah Hendry, eds. *Routledge Handbook of Water Law and Policy*. Taylor & Francis, 2017.

Course: Climate Change: Risk and Resilience

Instructor: Prof. Dr. Lars Ribbe (and guest professors)

Course status: Mandatory, Credit value- ECTS: 6

Course description: Climate change and variability of climatic parameters on one hand have profound impacts on water. On the other hand a large part of climate change adaptation measures are related to water resources management. This course will provide a state of the art discussion on human - induced climate change and important impacts on the natural, built and human environment, methods of risk assessment, monitoring and forecasting as well as adaptation through adequate solutions including information management and nature-based solutions. Participants will learn about the preparation of adequate plans to achieve water security and build resilience to climate change.

Course goals: Provide overview on the state climate change and its impact on water management as well as related concepts of risk assessment, adaptation and resilience.

Expected Learning Outcomes: Upon completion, the participant should be able to: 1. Describe the basic functioning of the global climate system and its interplay with other major systems (biosphere, atmosphere, hydrosphere); 2. Identify key water cycle relevant variables that are affected by climate and other environmental changes.; 3. Specify and quantify spatial, seasonal and inter-annual variability of important variables; 4. Apply methods of climate risk assessment; 5. Describe important methods and products of short and medium range forecasting; 6. Identify climate change adaptation and resilience measures connected to water related climate change risks.; 7. Know open data and tools to support risk assessment and adaptation planning.

Means of concretization: During the lectures: table, computer, projector;

Teaching methodology: Flipped classroom: recorded lectures and learning material provide online; dialogue, discourse and feedback provided in interactive in -class session; exercises provided online and results discussed in class;

Student assessment methodology: midterm evaluation (short oral exam combined with interim presentation of students 40%); final written report (60%).

Basic and supplementary literature for the course: 1. Ribbe, L., (2022), Lecture notes

Additional Literature: IPCC [Intergovernmental Panel on Climate Change] (2012) Special Report on Managing the Risks of Extreme Events and Disasters to advance Climate Change Adaptation (SREX); - *IPCC 2021 Climate Change: The physical basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*; - *IPCC 2022 Climate Change: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*; - Nature-based solutions *for* disaster risk reduction: UN Office for Disaster Risk Reduction, Engaging for resilience in support of the Sendai Framework for Disaster Risk Reduction 2015-2030; - UNDP [United Nations Development Programme] (2010) Mainstreaming Disaster Risk Reduction into Development at the National Level. A Practical Framework. UNDP Bureau for Crisis Prevention and Recovery; - UNDRR [United Nations International Strategy for Disaster Reduction (2019) Global Assessment Report on Disaster Risk Reduction (GAR)]; - Vogt, J.V., Naumann, G., Masante, D., Spinoni, J., Cammalleri, C., Erian, W., Pischke, F., Pulwarty, R., Barbosa, P., Drought Risk Assessment. A conceptual Framework. EUR 29464 EN, Publications Office of the European Union, Luxembourg, 2018. ISBN 978-92-79-97469-4, doi:10.2760/05722; - WMO 2020. *Muti hazard early warning systems*; - Climada documentation: https://climada-python.readthedocs.io/en/latest/tutorial/1_main_climada.html#Risk-assessment; - Climate Adapt: <https://climate-adapt.eea.europa.eu>

Course: Flood and Drought Management

Instructor: Prof. Dr. Laura Kusari

Course status: Mandatory, Credit value- ECTS: 3

Course description: Introduction to the theories of flood and drought risk management; basic hydrology and river catchment morphology; flood types; flood detection systems, warning and forecasting; flood mitigation measures, non-structural, structural measures; flood protection in urban areas; flood plain areas in flood protection. Introduction to drought risk concept, drought types classification and their impacts; assessing and monitoring drought variability; analyses of drought forecasting; drought monitoring and early warning; drought risk management strategies; non-structural and structural measures; drought adaption measures.

Course goals: Understanding and applying the methods and concepts of integrated flood and drought management. Understanding and applying main scientific concepts, necessary data and tools for the assessment and integrated management of flood and drought.

Expected Learning Outcomes: Upon completion, the participant should be able to: Understand flood and drought concepts; Identify flood and drought risk factors and associated mitigation measures; Understand and explain the main principles of flood and drought forecasting and warning and uncertainty issues associated with flood and drought forecasts; Be able to select site specific adequate adaptation measures to cope with floods and drought; Conceptualise and apply the main principles of flood and drought risk assessment and management,

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, individual assignments, group discussions, individual seminar paper, class presentations.

Student assessment methodology: First mid-term evaluation, 40%, Second evaluation, 40% Seminars, individual assignments, presentations 20%.

Basic and supplementary literature for the course: Environment Agency (2020), National Flood and Coastal Erosion Risk Management Strategy for England, APS Group; Watson, D., Adams, M., (2011), Design for Flooding, Architecture, Landscape and Urban Design for Resilience to Climate Change, John Wiley and Sons; Schanze, J., Zeman, E., Marsalek, J., (2004).

Course: Environmental Monitoring and Data Analysis

Instructor: Prof. Asoc. Dr. Mimoza Hyseni Spahiu

Course status: Mandatory, Credit value- ECTS: 6

Course description: This course includes an introduction to environmental monitoring, sampling techniques and analytical and statistical methods to measure and document environmental pollution in air, soil, sediments and the main focus on water. This course highlights pollutant sources, pollutant types, environmental biomarkers, sampling techniques, instrument selection, real-time environmental systems monitoring systems, and sample management. The course introduces applications for atmosphere and radiation, weather, air quality, hydrology, water quality, terrestrial ecosystems and aquatic ecosystems. Databases, metadata, analysis and modeling, standards and indicators. Data sharing and storage. Cases selected from the literature will be integrated into the course to improve participants' understanding of current environmental monitoring and analysis methods.

Course goals: Monitoring is critical to the assessment of environmental hazards. Standard sampling and analytical techniques have been developed to assess contaminant levels for a variety of media, including water, air, and living systems. New analytical methods are also developed when existing methods are insufficient for quantifying contaminant levels. The techniques for sampling, however, are fairly standard. This aim of this course is to introduce sampling techniques and analytical methods for determining contaminant levels. Students will learn and practice many methods to be able to collect samples in their research and in their professions. Emphasis on quality control, including documentation, calibration, and sample management, will ensure that students can fully defend their data and base good decisions on their measurements.

Expected Learning Outcomes: After the course is completed, the student shall be able to: Understand the basic terminologies related to environmental contaminant, monitoring, pollutants and ecosystems; Apply environmental sampling techniques in practice for water; Classify and categories sources and types of pollution; Analyze and investigate data and statistical techniques related to environment. ; Interpret the environmental data so that policy makers understand them better.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, in-class exercises using different materials, group project work of 2-3 students, homework.

Student assessment methodology: First rating 30%; Second rating 30%; Participation 10%; Final exam 30%.

Basic and supplementary literature for the course: Primary Literature: Environmental monitoring Hilary I. Inyang, John I. Daniels; Eolss publications, 2009; Additional Literature: Macrophytes as biological indicators of organic pollution in the Lepenci River Basin in Kosovo; Journal of Freshwater Ecology (2020); DOI: <https://doi.org/10.1080/02705060.2020.1745913>

Course: Water conservation and water efficiency

Instructor: Prof. Asoc. Dr. Figene Ahmedi

Course status: Mandatory, Credit value- ECTS: 6

Course description: In general, the course addresses the need for sustainable management of water resources. The course provides an overview of the basic concepts of water conservation and water efficiency. Topics covered:

Introduction to water conservation, problems caused by poor water management, alternative technologies for water conservation, water treatment, reuse, and recycling, domestic and small commercial wastewater reuse, instrumentation, measuring flow and consumption.

Course goals: Increase demand for sustainable water management in general in our country and help to ensure availability of water for future generations. The learning objectives of this course are: understanding the importance of the water conservation and water efficiency.; Creating a process to inform, involve, and educate the public (stakeholder/s) on issues related to water conservation and transferring-knowledge of water conservation to water users and water operators.

Expected Learning Outcomes: By the end of the course, students will be able to: Evaluate and use information gathered from scientific literature studies and applications related to water conservation and water efficiency.; Analyze conservation technologies and set steps for saving water.; Identify the right flow meter for water efficiency; Identify problems and think innovatively about ways to conserve or reuse water.; Prepare a presentation and report in English on water conservation (Communication and Social Competency).

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, class-works (exercises) and home-works.

Student assessment methodology: Evaluation from 0-100 %; First midterm: 35 % ; Second midterm: 35 %; Term paper: 30 %; Regular attendance – decisive in borderline cases ; Final exam.

Basic and supplementary literature for the course: Primary Literature: Ahmedi, F. Lecture notes offered; Additional Literature: Sturman, J et al., Water Auditing and Water Conservation, 2004, IWA, UK.; Seneviratne, M. A Practical Approach to Water Conservation for Commercial and Industrial Facilities, 2007, Elsevier Ltd.

Course: Water and Agriculture

Instructor: Prof.Dr. Arben Mehmeti

Course status: Elective, Credit value- ECTS: 3

Course description: This course is designed to provide many basic and applied aspects of crop irrigation practices and water resources management. The course explains about soil biology and the characteristics of soil organic matter. Soil classification, soil-water relationship and water capacity of soils as well as the rate of evaporation, forms and modules of irrigation of agricultural crops, distribution components of the irrigation system, including irrigation planning. Recent chapters also include water pollution from agricultural production and monitoring and reducing the impact of NPS pollution from agriculture.

Course goals: To provide students with basic knowledge of soil biology, organic matter and soil calcification. Knowledge of agro-geological and pedological factors and processes in order to advance them. Proper management of water resources for crop production needs. To provide students with knowledge about water, agricultural water use, irrigation systems, agricultural water pollutants and monitoring of pollutant water in agricultural production.

Expected Learning Outcomes: To be able to describe the agro-geological, pedological and biological properties of the soil.; Identify the needs of plants for irrigation and assess the rate of evaporation; Know about irrigation forms and water qualities and properly manage water resources in plant irrigations; Be able to describe basic hydrological processes and the water regime and balance of the soil; Identify the occurrence, flow and storage of groundwater; Recognize and monitor water pollutants in agriculture.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, in -class exercises using different materials, group project work of 2-3 students.

Student assessment methodology: Course threshold is 55%, Student attendance 5%; Individual tasks performed in class 10%; Individual homework completed 5%; Assessment tests 30%; Final exam 50%.

Basic and supplementary literature for the course: Primary Literature: Srivastava, P., Gupta, M., Tsakiris, G., and Quinn, N. (2020). Agricultural Water Management Theories and Practices. Elsevier. Huang, P. M., Li, Y., Sumner, M. E. (2011). Organisation for Economic Co-Operation Development (OECD). (2012). Water Quality and Agriculture. IWA Publishing Laycock, A. (2010). Irrigation Systems: Design, Planning and Construction. CABI; Reprint edition.

Course: Public Health

Instructor: Prof. Ass. Dr. Naim Jerliu

Course status: Elective, Credit value- ECTS: 3

Course description: This course addresses important topics and methodological approaches in the public health field related to water resource management. Specifically, the course covers applications and domains of public health: - Water related public health (water quantity, water quality, water related diseases; sanitation, hygiene and health; monitoring programmes, case studies); - Urban water cycle management (water sensitive design; sponge city; recycling and reuse); - Water treatment technologies (waste water characteristics; biological and membrane technologies); - Integrated sanitation concepts in the context of sustainability transitions (case study).; - The climate change and water supply; the climate change and sanitation.; The course, also, introduces students to water related public health issues in the context of Kosovo and possible future approaches to control the major public health problems related to integrated water resources management.

Course goals: The course aim at providing basic knowledge of public health, sanitation, urban water resources management as well as technological and managerial options to address them, in a global and Kosovo context.

Expected Learning Outcomes: After completion of this course, student will be able to: Define public health and water related public health issues (water quantity, water quality, water related diseases; sanitation, hygiene and health; monitoring programmes, case studies); Understand urban water cycle management (water sensitive design; sponge city; recycling and reuse); Describe water treatment technologies (waste water characteristics; biological and membrane technologies); Discuss integrated sanitation concepts in the context of sustainability transitions (case study); Identify significant gaps in the current knowledge base concerning technological and managerial options to address water related public health issues; Identify possible future approaches to control major public health problems related to integrated water resources management, as well as the climate change challenge, to water supply and sanitation. Identify and discuss water related public health issues in the context of Kosovo.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: The course consists of lectures with inputs of basic knowledge, examples/case study, PBL assignments, classroom interaction-group discussions, project work/seminar/workshops, individual homework, and group presentations. Traditional and self-directed, web-based learning materials are included.

Student assessment methodology: Regular attendance / Class Activity/Interaction: 10% ; Seminars, topic/activity response presentations: 10%; Project/individual written assignments: 20%; Final Exam/ Written Examination: 60%; Assignments will be graded based on their content, organization, and quality of writing.

Basic and supplementary literature for the course: Primary Literature: Robert H. Friis. Essentials of environmental health. Third edition. Burlington, MA: Jones & Bartlett Learning. (2019); Howard Frumkin, Editor. Environmental Health: From Global to Local. Third Edition. John Wiley & Sons. (2016).; WHO. Water, Sanitation and Hygiene strategy 2018-2025. Additional Literature: WHO. Water Sanitation and Health resources:<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health>;

Course: Sustainable Development Goals

Instructor: Prof.Ass.Dr. Lavdim Osmanaj

Course status: Elective, Credit value- ECTS: 3

Course description: This course is designed to provide a general understanding of the concept of the SDGs. SDGs lies at the intersection of the environment, society and economics. This course explores the concepts of SDGs at different geographical scales (local, national and international). We examine the applications, indicators, measurement tools of SDGs for analysis and decision making in support of environmentally sustainable development with focus on the water sector from a national perspective. Case studies and problem-solving exercises will be used to stimulate learning and provide practical experience in addressing SDGs issues.

Course goals: Understanding the basic concept of Sustainable Development Goals (SDG), Knowing the history of the SDG, methodologies and perspectives of SDG; Explaining the SDGs relations to society, economy, education, water, climate change, policy and governance.; Explaining the potential environmental, social and economic benefits of SDGs and how that relates to resilient and healthy communities.

Expected Learning Outcomes: Obtain basic understanding of main concepts of Sustainable Development Goals (SDG), Perform methodology and tools for using SDG in the process of Integrated Management Plans; Assess and improve the policy and governance based on the use of the SDGs.; Stimulate learning and provide practical experience in addressing SDGs issues. In the end of the course students will be able to: Discuss analyses of the SDG concept on the national as well as on the global scale, Selection of potential strategic options for SDG, discussion and analyses of the advantages and disadvantages of implementation of SDG, Understanding the SDG challenge for institutions and their responsibility and their potentials for action, Use the SDGs in the process of the Development of Integrated Management Plans.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, in-class exercises using different materials, group project work of 2-3 students.

Student assessment methodology: Course threshold is 100%, Student attendance 5%; Individual tasks performed in class 30%; Individual homework performed 15%; Evaluation by tests 50 %.

Basic and supplementary literature for the course: Primary Literature: United Nations. Sustainable Development Goals. LealFilho, W.; Azeiteiro, U.; Alves, F.; Pace, P.; Mifsud, M.; Brandli, L.; Caeiro, S.; Disterheft, A. Reinvigorating the sustainable development research agenda: The role of the sustainable development goals (SDG). Additional Literature: United Nations Conference on Sustainable Development Out come Document: The future we want. A/CONF.216/L.1 of 19 , Development cooperation in the light of sustainable development.

Third Semester

Course: Ecosystem based Management

Lecturer: Prof.Dr.Ferdije Zhushi Etemi

Course status: Mandatory, Credit value- ECTS: 6

Course description: This course will cover topics fundamental to future water resources managers in the country. Students will first be introduced to the European Water Framework Directive, which main objective is the management of river basin ecosystems. The course will cover ecosystems: Lakes, reservoirs, ponds, rivers, wetlands. The following topics will be taught: Water and Ecosystems- Introduction to National Based Solutions, Freshwater biodiversity; Habitat and ecosystem services; Criteria for freshwater ecosystem classification-types; Ecological status of water ecosystems; Restoration of riparian ecosystems; Climate change adaption and disaster risk reduction using EBM Urban water security.

Course goal: The aim of this course is to equip students with an advanced knowledge and skills relating to freshwater ecosystems and their management, with the main focus on River basin management. The course aims to develop students the knowledge of freshwater resources, (rivers, lakes, ponds, wetlands, etc) their biodiversity and the use of biological quality parameters in determining the ecological status of the water ecosystems as well as with human impact in riparian ecosystems and their restoration. The development of students' deep understanding of the anthropogenic disturbances in water ecosystems and impact the climate changes cause in water ecosystems and the adaptation to risk reduction using EBM Urban water security is one of the goals of this course.

Expected learning outcomes: Upon completion of this course, students will have these sets of knowledge, skills and competencies: 1. Knowledge and understanding of freshwater ecosystem concepts. 2. Dynamics of freshwater ecosystems and biological, environmental and social processes that shape the ecosystem function and services. 3. Understanding on classification on inland water ecosystems by Types. 4. Identification of the main groups of freshwater organisms and use them in assessment of ecological status of freshwater ecosystems and their monitoring. 5. Synthesise of interdisciplinary knowledge and its application in the development of River basin management and Monitoring plans. 6. Climate changes and their impact in freshwater ecosystems and the adaptation to risk reduction using EBM Urban water security. 7. Analyses of field literature, write essays and present them for the audience.

Teaching methodology: lectures (PP presentation), seminars (where research articles on Freshwater ecosystem management will be presented and analyzed, first by the lecturer and then by students), field work (collecting aquatic organisms, animals and plants, in a river ecosystem, sorting, classification and assessment of water quality), case studies and short videos on field methodologies may be used, too.

Student assessment methodology: Assessment of students on theoretical part will be done in seminars and in a final exam, whereas practical part will be assessed with work given to the students to collect benthic macroinvertebrates in the field, identify taxonomic groups and calculate the index for the water quality in the sampling location. This work should be submitted in a Paper form, the compilation of which will be taught in the lectures. Theoretical part: seminar (Essay): 30%, Final exam: 40% Practical part: field work and submission of the paper 30%; Total 100%.

Concretization tools: During the lectures: blackboard, computer, projector and markers; in the laboratory and field work the binocular microscopes, alcohol as a preservative, sampling nets, plastic plate, glass jars and forceps. Ratio between the theory and practise : 50:50 2 hours lectures + 2 hours practical work (lab or field work)

Basic and supplementary literature for the course: 1. "Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy"

2.UN: A Framework for Freshwater Ecosystem Management (4 volumes); 3. Sven Jorgensen, Jose Galizia Tundisi and Takako Matsumura Tundisi:Handbook of Inland Aquatic Ecosystem Management, SBN 9780367865665 Published September 30, 2020 by CRC Press, 452 Pages; 4. W. Patric McCafferty: Aquatic Entomology: The Fisherman's and Ecologist's Illustrated Guide to Insects and their Relatives, Publisher: Jones & Bartlett Learning; 1st edition (January 1, 1983).

Course: Geospatial Tools for IWRM Implementation

Lecturer: Prof. assoc. Dr. Perparim Ameti

Course status: Mandatory, Credit value- ECTS: 6

Course description: Geographic Information Systems and spatial analysis is a course of high importance in water observation and management. During this course students gain basic theoretical and practical knowledge of GIS, its practical implementation in social problem-solving, its components (hardware, software, data and people), data acquisition and integration, spatial analyses, geostatistics, decision-making support, management of GI projects, applications and trends in GIS.

Course goals: This course aims to teach higher levels of geoinformation science and methods for water analyses and management.

Expected Learning Outcomes: -Familiarity with key GIS concepts and terms

- Identification of major components of GIS from both technical and organizational point of view
- Application of spatial operators, e.g. describing feature shapes as well as spatial patterns, finding a shortest path, model visibility, interpolation application and explanation of differences, advantages and disadvantages among alternative techniques
- Recognition of problems in using earth observation in land and water analysis
- Use of geostatistical techniques to solve practical problems
- Simulation of spatial processes
- Explanation of benefits of integration of spatial information into general ICT
- Evaluation of the results of data analysis, criticize data the process, and defend the conclusion
- Discussion of reasons why spatial information provides added value
- Define typical GIS applications
- Support spatial decision process effectively

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lecture, Discussion during lectures, Exercises, Group work

Student assessment methodology: Prerequisite for assessment: more than 50% attendance at lectures and positive evaluation of seminar paper by the lecturer. First valuation: 15%, Second Valuation: 15%, Homework: 30%, Attendance: 10%, Final Exam: 30%.Total: 100%

Basic and supplementary literature for the course: Primary Literature: K. T. Chang: Introduction to Geographic Information Systems, McGraw-HillInternationalEdition, 6thEdition, 2011. M. de Smith - P. Longley - M. Goodchild: GeospatialAnalysis - A comprehensiveguide, WinchelseaPress, 4thEdition, 2012. Campbell J.E., Shin M. Geographic Information SystemBasics. V.1. 2012.Additional Literature: P. Longley et al.: Geographic Information SystemsandScience, 2nd Edition, JohnWiley&SonsLtd., 2005. Kainz W. Geographic Information Science (GIS). 2004.

Course: Hydraulic Structures

Lecturer: Prof. Dr. Laura Kusari

Course status: Mandatory, Credit value- ECTS: 6

Course description: Hydraulic structures introduce students to the fundamentals of hydraulics needed to impart a sound foundation in the planning and hydraulic design concepts of the river engineering structures, dams and appurtenant structures.

Course goals: Hydraulic structures aim to provide knowledge of the basic principles of hydraulics as well as the planning and engineering design concepts of river engineering structures and dams.

Expected Learning Outcomes: Upon successful completion of this course, student should be able to:

- Understand the principles of hydraulics, open channel flow and flow in closed conduits,
- Understand river morphology and river engineering works,
- Design and sketch a real river section and river alignment changes,
- Differentiate between the various types of dams,
- Select, sketch and construct a hydraulic structure for river regulation and manage the same.
- Pre-design simple dams and channels

Means of concretization: Projector, computer, table, workbook, marker.

Teaching methodology: Frontal lecture, individual assignments, in-class presentations, discussions, individual seminar work,

Student assessment methodology: First midterm evaluation 40%, second evaluation 40%, seminars, assignments 20%

Basic and supplementary literature for the course: Primary Literature: Kusari, L., (2021), Lecture notes. Additional Literature: Sturm, T., (2009), Open Channel Hydraulics, McGraw-Hill Education; Lindell, J., Moore, W.P., Kong, H.W., (2018). Handbook of Hydraulics, McGraw-Hill Education. Przedwojski, B. et al., (1997), River training Techniques. Fundamentals, Design and Applications. Published by A. A. Balkema, Netherlands.

Course: Water and Conflicts-Power and politics in the Water Sector**Lecturer: Dr. Linda Gusia****Course status: Elective, Credit value- ECTS: 6**

Course description: This course is based on the premises that environmental issues are social issues. More specifically, our practices, attitudes, social structures and the institutions shape the ways in which we interact with the environment, including water. We will look at how culture shape our understanding and examines the meaning and power of ideas as compared to other categories of knowledge. This course introduces and integrates sociological thinking and gender studies in understanding environmental justice and the politics of water. By unpacking some of the central challenges of water resource politics, particularly in contexts where water insecurity becomes a threat. We will begin by identifying basic social concepts for thinking about water as a shared, limited, non-substitutable and a resource of fundamental importance for life. During the subsequent weeks we will look at the relationship between water insecurity, and gender, food insecurity, increased pollution and mobilizations around spatial justice and water. The course takes a broad view of what “water conflict” means, and includes discussion of attempts to deal with social and political aspect of water protection and rights.

Course goals: The course seeks to increase student’s awareness on water issues and provide them with a foundation to think critically and act upon uncertainty dictated by a changing climate. The course aims to provide a social science framework and methodology to research. It will also explain the importance of understanding social contexts and the increased risks around water conflict. Give examples of movements that center around water protection and rights. The course is intended to benefit students not only in academic content and skill-building but also in their personal lives, as we continue to suffer from pollution, natural disasters, and resource conflict.

Expected Learning Outcomes: Upon successful completion of this course, students will be able to:

- Describe how water has environmental, sociological, political and economic components that shape their everyday activities.
- Describe the social inequalities associated with water consumption and distribution.
- Identify relevant stakeholders and institutions associated with contemporary water challenges.
- Analyse how culture shapes our action and understandings around water.
- Synthesise diverse types and sources of data to illustrate different conflicts around water.
- Synthesise interdisciplinary research.
- Apply interdisciplinary research to best solve contemporary environmental and social problems and conflict around water.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, individual assignments, group discussions, individual seminar paper, class presentations.

Student assessment methodology: The pass rate of the course is 60%. Student attendance 10%; Individual tasks performed in class 15%; Individual homework performed 15%; Assessment from tests 20%; Final exam 40%.)

Basic and supplementary literature for the course: Escobar, Arturo. Hapatdrejtnjėekologjiejepoliteantiesencialiste. *Current Anthropology*, 40:1 (february 1999) pp: 1-30. Cielo, Cristina, LissetCoba, & Ivette Vallejo. “Women, nature, and development in sites of Ecuador’s petroleum circuit.” *Economic Anthropology* 2016: 119-132 pp. Additional: UN Women. *Mainstreaming Gender in Green Climate Fund Projects*. GCF, 2017. Jha, Nitish. “Gender and decision making in Balinese agriculture.” *American Ethnologist* 31(4) 2004: 552-572. *Living Planet Index*.

Course: Hydro-informatics / Hydraulic Modeling

Lecturer: Prof.Ass.Dr. Lavdim Osmanaj

Course status: Elective, Credit value- ECTS: 3

Course description: This course has two main aims. First, it seeks to give an introduction and comprehensive background on the general concepts and equations for hydraulic engineering and groundwater flow. Second, it gives practical applications of modelling systems such as HEC-RAS and HEC-SSP models for open-channel flow in hydraulic engineering and MODFLOW model for groundwater flow. These different models can be used as support in decision making processes in river basins.

Course goals: Explain the different types of flow conditions

- Explain the conservation laws in hydraulic engineering
- Explain the hydraulic models to analyse flow conditions in open-channel flow
- Explain the principles and equations of groundwater movement
- Explain how to use MODFLOW groundwater modelling system

Expected Learning Outcomes: Upon successful completion of this course,

students will be able to: Classify types of fluid motion conditions; Apply conservation laws to solve issues in hydraulic engineering; Use hydraulic models such as HEC-RAS and HEC-SSP to solve and analyze flow in open channel; Interpret and use groundwater equations to solve groundwater flow problems; Apply MODFLOW modelling system to solve groundwater flow problems.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: Lectures, discussions during lectures, exercises, group work.

Student assessment methodology: Individual assignments completed in class 30%; Individual homework completed 30%; 40% exam.

Basic and supplementary literature for the course: Chow, V.T., 1959, Open-channel hydraulics: New York, McGraw-Hill, 680 p. <http://heidarpour.iut.ac.ir/sites/heidarpour.iut.ac.ir/files/u32/open-chow.pdf> Kundu P, Cohen I and Dowling D, Fluid Mechanics (2015), A.W., E.R. Banta, M.C. Hill, and M.G. McDonald, MODFLOW–2000 – “The U.S. Geological Survey Modular Ground – Water Model – User Guide to Modularization Concepts and the Ground – Water Flow Process, U.S., 2000. Additional: Harbaugh, A.W., and M.G. McDonald, - “User’s Documentation for MODFLOW–96, An update to the United States Geological Survey Modular Finite Difference Groundwater Flow Model, U.S. Geological Survey Open – File Report 96 – 485, 56 pp, 1966.

Course: Watershed Management

Lecturer: Prof.Asoc.Dr. Figene Ahmedi

Course status: Elective, Credit value- ECTS: 3

Course description: Introduction to watershed management; land-use planning, disaster mitigation and watershed management, categories of watershed degradation and water-related disasters.

Watershed management; development of a management system, funding arrangements, institutional/legal requirements, public involvement, human resource and policy development. Data collection, watershed management, land resource and natural hazard assessment. Options for watershed management and hazard reduction.

Course goals: The learning objectives of this course are:

- Teaching key components of watershed management, their necessity, principal approaches.
- Understanding the importance of land-use and planning in watershed management, mitigation of disaster hazards and effects, development of management strategies, resource utilization and contribution of public to the process.
- Gaining usage of tools like models and decision support systems in watershed management studies.

Expected Learning Outcomes: By the end of the course, students will be able to:

- Intensify knowledge on watershed management (knowledge).
- Evaluate and use information gathered from scientific literature studies and applications related to watershed management (skill).
- Analyse, synthesise and evaluate information about principles and applications of watershed management, land-planning and water resources management (skill).
- Prepare a presentation and report in English on watershed management (Communication and Social Competency).

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: The course is developed from lectures offered in the form of scripts.

Student assessment methodology: Evaluation is done from 0-100%; First rating: 35%; Second rating 35%; Assignment 30%; Regular - crucial attendance in border cases; Final exam: 70%.

Basic and supplementary literature for the course: Ahmedi, F. Lecture notes offered

Additional: WatershedManagement; Practice, PoliciesandCoordination, Robert J. Reimold (edit.), McGrawHill, 1998, USA. Watersheds; Processes, Assessment and Management, Paul A. DeBarry, JohnWiley&Sons, Inc., 2004, NewJersey.

Course: Entrepreneurship**Lecturer: Prof. Ass. Dr. Mjellma Carabregu Vokshi****Course status: Elective, Credit value- ECTS: 3**

Course description: The course provides an economic understanding of entrepreneurs and the role that they play in the development of the wider economy. Additionally, the course provides an insight into the emergence of entrepreneurship and a platform from which to undertake research or implement economic analysis of entrepreneurial endeavors.

Course goals: The course pursues the following objectives:

- Examination of who becomes an entrepreneur and why, by examining the theories of entrepreneurship, methods for applied entrepreneurial research, the incentives to become an entrepreneur and the entrepreneurship methods of specific groups.
- Examination of the financing of entrepreneurial ventures, from debt (finance) to venture capital and other sources of capital.
- Examination of entrepreneurial inputs, performance and the broader community - covering performance measures, wealth accumulation, job creation, innovation, returns to human capital and entrepreneurial survival.
- Exploration of the entrepreneur and public policy - examining public policy, taxation, market regulation and their impact on entrepreneurs.

Expected Learning Outcomes: Upon successful completion of the course students will be able to:

- Understand economic traits and roles of an entrepreneur.
- Understand entrepreneurial financing and capital arrangements.
- Understand public policy and constraints on entrepreneurs.
- Analyse and present an analysis of entrepreneurial policy.

Means of concretization: projector, computer, table, workbook, marker.

Teaching methodology: During the lectures, various materials will be distributed to students, which will be used for analysis and discussion. Furthermore, students will work on projects in groups.

Student assessment methodology: Test 1 - 30% Test 2 - 30%; Attendance - 10%; Individual assignment - 30%; Course threshold is 51%.

Basic and supplementary literature for the course: Simon C. Parker *The Economics of Entrepreneurship*, 2018; *Entrepreneurship: The Practice and Mindset*, 2nd edition, 2020, by Heidi M. Neck, Christopher P. Neck, Emma L. Murray; John Bessant, Joseph Tidd, (2015), *Additional: Social Entrepreneurship and Innovation: International Case Studies and Practice*, Ken Banks, 2016.

As for the ECTS, for every 1 ECTS, 25 study hours are calculated, according to the Statute of UP. An example of student workload calculation that reflects the assignment of 3ECTS for a subject, is shown in the following table.

Table 8. Example of student workload determination

Activity	Hours	Day / Week	Total
Lectures	2	15	30
Theory / Lab Work / Exercises	1	15	15
Practical work	6	2	12
Preparation for the midterm test			
Consultations with the instructor	1	2	2
Fieldwork	2	1	2
Test, seminar paper			
Homework	1	8	8
Self-study (library or home)			
Preparation for final exam			
Assessment time (test, quiz, final exam)			
Projects, presentations, etc.	1	8	6
Total			75

Upon successful completion of this programme, students will be able to:

1. *Demonstrate comprehensive knowledge of water resources assessment, development and management;*
2. *Identify the regulatory aspects of water management and the water framework directive;*
3. *Recognize and appreciate social, political, economic and environmental impacts on water resources management;*
4. *Investigate and apply knowledge to obtain responses to the worldwide problems of increasing water scarcity, flood risks and water resource management;*
5. *Combine a broad range of science and management methods for the water resources management issues;*
6. *Understand the economics involved in the water resource management,*
7. *Implement and operate appropriate and sustainable solutions to integrated water resources management, with due regard to the technical, social, environmental and institutional constraints.*

Standard 4.4. All the courses within the MSc in IWRM curriculum have analytical syllabi comprising the basic course information (such as course title, level, status, ECTS credits etc.), course description, its goals and course learning outcomes, as well as the distribution of classes during weeks. Syllabi also contain student workload in hours, teaching and assessment methods, primary and additional literature and academic policies and code of conduct. The syllabi of all the courses are shown at the faculty website and student can access them through the link: <https://fn.uni-pr.edu/page.aspx?id=1.67>). Syllabuses of the MSc in IWRM programme are also electronically attached to this self-assessment report. At the same time, the course material is offered to students through SEMS, or in physical form. Last years (due to the recent pandemic) the material was also provided through the virtual platform Google Classroom.

Standard 4.5. Teaching in the MSc in IWRM programme is in the English language. The language skills of the students and other acceptance criteria (including the number of students to be enrolled in the MSc in IWRM programme) are to be specified on the call for students, together with the decision of the UP Senate, and the proposal of the academic unit. This is determined by the provisions of the Statute of the

UP (see Article 106 in the Statute of the UP) [S1]. Language training prior to the onset of the programme will take place if necessary.

Standard 4.6. The students and instructors form a strong partnership in which both sides work to achieve targets and reach their learning outcomes. As mentioned, the learning outcomes are presented in a course syllabus, and the same are thoroughly explained and discussed with the students. All these activities increase student's best achievements. As instructors, the academic staff of the FCE makes every reasonable effort to ensure that their student assessments reflect the true merit of each student. The instructor-student relationship at UP is regulated through special legal provisions that exist in the Code of Ethics of Academic Staff, Article 7 and Article 8 [T4].

Standard 4.7. The Faculty of Civil Engineering offers many study programmes, at the Bachelor's and Master's level and therefore there are many different learning outcomes. In this regard, the study programme uses teaching strategies that are fit for the specific learning outcomes. In the Master's Programme in IWRM curricula, all the courses have analytical syllabuses in which teaching methods are specified in order to achieve learning outcomes. In cases of different group of students, course specifications, teaching methods and assessment methods are flexible to that group of students. This is as a result of an instructor's experience. It is also specified in the statutory provisions as well as the Code of Ethics of Academic Staff, Article 8.4, which states that "the responsibility of teaching fails if discrimination is applied to different groups of students" [T4].

The Hydrotechnical Department has had support from the TH Köln through the preparation for the accreditation process, by receiving feedback on the drafted curriculum, feedback on the drafted syllabuses, inputs on the Self Evaluation Report and participation in interviews during the process of accreditation.

Also the TH Köln supports the MSc in IWRM programme in lecturing, by providing lectures, peer-to-peer support to local lecturers as needed, including exchange of teaching materials and pedagogy see attached Draft Agreement, T15].

Standard 4.8. The Statute of the UP, Articles 108 and 109 [S1] and the Regulation for Master of Science degree studies [R5] defines the policies and procedures for the assessment of student's academic work. The faculty is responsible for organising exams. Assessment methods are specified in each course's syllabus and are in accordance with the methods for determining academic success defined in the Statute of UP. Those methods, are communicated to the students by professors, at the beginning of each course. The assessment methods that can be applied are: Exam, colloquium, seminar paper, professional practice and/or practical test during exercises (Statute of the UP, Articles 108, 109, 110, 111 [S1]).

Standard 4.9. For verifying the standard of student's achievement in a course, the used mechanisms are valid, reliable and consistent over time. Those standards are equivalent to all academic units of the University of Prishtina, and courses offered in the MSc in IWRM programme, as those specified in the Statute of UP, Article 109 [S1]). Student achievement is defined by scores 10 to 5. Where 10 and 9 are excellent, 8 is very good, 7 is good, 6 is sufficient and 5 is insufficient. All the scores are submitted in the electronic student management system (SEMS), within a strictly defined period of time.

Standard 4.10. If student's achieve an insufficient grade after the first assessment, they may re take the same exam at a following date. This can be done a maximum of three times for the same course. In case of repeated failure or dissatisfaction with grade, students can act according to the procedures set out in the Statute of UP, Article 114 and Article 115 [S1]. The results of student assessment are consistently unsatisfactory, the instructor is responsible for student-instructor communication to achieve the best learning outcomes. This communication takes place through consultations at the request of the instructor or the student to overcome learning deficiencies and achieve optimal learning outcomes.

Standard 4.11. In the curricula of the MSc in IWRM programme, as mentioned, there is also an internship course foreseen for the fourth semester, second year of studies. The internship has 10 ECTS allocated and is a mandatory. The internship is organized by the course holder who is an instructor in FCE and students attend this course in companies, organizations and professional institutions, relevant to the integrated water resources management. During this time of internship, the student is lead and mentored by the supervisor in the company, organization or institution. During this time student must prepare activity report which upon completion of the internship the student must present and interpret to the course holder (professor from FCE) or a tutor. This practical work can lead to further research and diploma work.

Standard 4.12. To facilitate this internship, the FCE signs cooperation agreements with local institutions (organisations) [T3] (some of them listed in Standard 4.3.), but not only. The internship is to be carried out with the help of the advisory body [T5] within the FCE, invitations are sent via email to the companies, organisations and institutions. These internships offers mutual benefit to academics and water professionals. They help students become part of a water resources experts, leading to future collaboration and employment opportunities.

Performance indicator 4.1. The Faculty of Civil Engineering, through its study commission, reviews the study programmes at least once a year. The quality office also collects findings through questionnaires with all stakeholders involved. These assessments then help to generate reports that indicate the achievements or shortcomings of each subject. Reports are submitted to programme providers who can plan strategies to overcome any shortcomings. In these quality office reports the curricula are constantly evaluated and re-evaluated. Afterward, necessary recommendations for increasing the quality of the programme and performance are issued.

Performance indicator 4.4. The Faculty of Civil Engineering constantly updates its programmes and syllabi to include new literature as well as research and scientific works of faculty.

SWOT analysis for the content of the educational process:

A. Strengths:

- A more comprehensive and highly participatory approach,
- Introduction of a more practical examples to understand theory – focus on case study approach,
- Combination of group of water engineering courses and management courses,
- Develop new leaders who are capable of using technical skills, practical tools, and policy knowledge to solve complex water related issues,
- Broade and enhance knowledge of current water challenges,
- Improvement of communication among different stakeholder groups on water related matters,
- Flexible programme adoptable to local, regional and global market demands.

B. Weaknesses:

- No weaknesses related to the content of learning processes.

C. Opportunities:

- Creation of a community of water experts who have full knowledge to apply IWRM and to strengthen the capacity of interlinked challenges in the water sector,
- Capacity building of institutions that understand the multifaceted challenges of water resource management,
- Enhancement of technical and scientific skills that bridges theoretical and practical knowledge of water sector,
- Development of effective leadership capacity as well as strategic, managerial and technical skills,
- Flexibility to incorporate new ideas and concepts into curricula that emerge from international collaboration.
- Support for relevant qualifications required for national and cross border water cooperation,
- Gain career opportunities in regional and international cooperation and development,
- Entry a network of excellence in IWRM.
- Leadership positions in the public and private sector in the region and beyond,
- Mobility of academic staff and students at regional and international level in the field of environmental engineering.

D. Threats:

- Possible delays in the mobility of students and academic staff due to Covid-19 and the lack of visa liberalisation.

2.5 Students

Standard 5.1. Student's admission to the Integrated Water Resource Management Master's Programme is carried out through an exam, following the public announcement. The public announcement comes from the University of Prishtina in coordination with each academic unit and specifies admission criteria. The University Senate in accordance with the provisions of the UP Statute [S1] is responsible for determining the number of candidates to be admitted in the first year, considering the number proposed by the Faculty Council of the Faculty of Civil Engineering for MSc in IWRM programme. Admission requirements are consistently and fairly applied to all applicants.

Standard 5.2. The MSc in IWRM programme is dedicated to candidates who hold the bachelor's degree or similar credentials from other universities and have accrued the equivalent of at least 180 ECTS credits.

Standard 5.3. The total number of enrolled students is projected to be 20 students for each academic year. This number may vary depending on the requirements of employers and the interest of students in the coming years. Enrollment in the Integrated Water Resources Management programme will ensure an effective and interoperable process of teaching and learning as well as increasing learning outcomes. According to the regulation which, among other matters, regulates the issue of creating groups for students [R12], the group of students differs across academic units. For the Faculty of Civil Engineering, the lectures have a minimum of 5 students and a maximum of 50; for theoretical exercises the minimum is 5 and the maximum 20 students and for laboratory exercises, the minimum of the student group is 5 and the maximum is 15 students. This number of students in the group is valid for compulsory courses. The group number varies for elective subjects. If, the number of students enrolled is less than the minimum stated above, the number of students enrolled determines the size of the group (see Article 25, point 3 of this regulation). Excluded are lectures conducted in foreign language, start with a group of only 7 students (Article 26, R12).

Standard 5.4. Student performance assessment is conducted according to the policies established by the FCE and UP. Student performance assessment results are available through the unified online SEMS system, with faculty announcing the results at least two weeks after the exam. In cases of poor performance or student's dissatisfaction with the assessment, students may refuse the grade and retake the exam. In both cases, students are supported through mentoring by professor. The students enrolled in MSc IWRM will have professors and mentors responsible for their wellbeing and academic achievements. The professor-mentors will be nominated by a group of students at the beginning of their Master studies, and they will guide students through out the master's programme. Professor-mentors not only help students achieve the learning objectives, but also help with social affairs, emotional issues and other matters when needed by.

Standard 5.5. The results obtained by the students for each subject are stored by the responsible instructor in SEMS, printed as a physical application form, signed by the instructor and archived in the FCE administration. The students evaluation results are archived for student service, administration and management purposes. It is the SEMS system [R6] which confirms that the student has fulfilled the obligations provided by the study programme. This is done by the administrative staff, who keep the records of the past exams during the semester and academic year and records progress made from year to year until graduation. At the end of studies, students works on their diploma thesis, which certify learning achievements and demonstrate application of information obtained during studies related to the fields of integrated water resources management. Students, after completing all exams and defending their diploma thesis in the Integrated Water Resource Management Master programme, will be awarded a degree with the title " Master of Science - Integrated Water Resource Management " .

Standard 5.6. The policy of UP is to promote equality of opportunity for all students. This policy will also apply to students in the programme using all the mechanisms that enable a equitable treatment of students in special situations. The FCE announces three regular public exam deadlines in accordance with Article 111 of the UP Statute, namely: winter (January), spring (June) and autumn (September). Also, for students of UP, specifically FCE, additional exam deadlines are organised to serve full-time students and graduate students, to help them achieve expected results in due time. Schedules for each exam deadline are announced by the FCE management posted physically on the FCE "windows" and electronically on the FCE webpage, under "Schedules". Instructors and the students must adhere to the announced schedule for exams. Studies at MSc in IWRM last two years, within which the student must graduate. However, the flexibility of policies set at the UP level allows the student to extend the duration of the study period. Namely, there is a decision issued by the UP Senate regarding the extension of the graduation period for bachelor's, master's and doctoral studies.

Standard 5.7. The results of the student's assessments are made public for the student and stored by faculty in SEMS. Through SEMS [R6], a statistical report is generated. From this statistical report instructors reflect on the achievement of objectives during teaching and learning. Statistical data on indicators such as progress and completion rates are maintained in SEMS and reported regularly in periodic programme reports. The monitoring of lectures now is through electronic system where are registered all lectures and student's presence. It is regulated with Rules of procedure of the electronic system for student management (SEMS) at UP (R6).

Standard 5.8. The research work of students will be supervised and assisted by professors, with special emphasis on the authenticity of the research work (for example in the form of an essay or diploma thesis). At the university, professors and students have access to anti-plagiarism software, which is plagiarism check. In addition, the UP regulations foresee penalties for acts of plagiarism by students. In cases where the student's seminar paper is not original then that paper is cancelled. However, in cases where the master thesis's is plagiarised, then the scientific title can be revoked. These sanctions are set out in the Statutes (S1). For procedures and disciplinary responsibilities for UP students there is a special regulation issued by UP [R8] and the Code of Ethics (T4). UP is in the process of developing a special Code of Ethics for scientific research, through the Research Cult project.

Standard 5.9. The rights and obligations of students are set forth in the Statute of UP (S1), Regulation for Master Studies (R5), the Regulation on Procedure and Disciplinary Measures for UP students (R8), the Regulation on the Election Procedure, Establishment and Work of the Student Parliament (SP) and Student Councils (SC) of UP (R10), the Code of Ethics (T4), Regulation on Academic Mobility of Students (R7). All of these rules are published on the official UP website (www.uni-pr.edu). To promote these rights, the UP administration has distributed brochures summarizing their rights to academic appeals: appeals against instructor evaluations, appeals of decisions of the study committee, disciplinary committee, dean, council, Senate and other bodies. Student representatives also promote these rights. Also, in the service of students and graduates from UP is the Center for Career Development (CCD) which aims to provide opportunities for personal and professional development through information, counseling, training, mediation with the employer, providing academic advice and other activities. Information on activities, of which both students and graduates can be a part, is sent by e-mail to the CCD [T8]. FCE also has an e-Career page [T9] within this center, through which students can be informed the latest information on trainings, internships, fairs, tips and other activities.

Standard 5.10. Regarding the transfer of students, it is regulated by Article 142 (Change of direction of studies) of the Statute of UP [S1]. This Statute also regulates the procedures for recognition and transfer of ECTS credits from other institutions and within UP units. Also, for recognition and transfer the relevant documents (tuition agreement, transcript of grades, diploma supplement) are used.

Within the programme of scientific and educational cooperation of the University of Prishtina with other International Universities, the Faculty of Civil Engineering with all study programmes is provided with scholarships in any field of interest for study levels: bachelor's, master's or doctorate. Interested students have been offered mobility scholarships at International Universities, in departments related to the fields of Water Resources and Water Engineering, such as:

- Middle East Technical University, Turkey - Faculty of Engineering (2017, 2018, 2022).
- Silesian University of Technology - SUT, Gliwice, Poland (2018).
- University of Trento, in Italy, in the field of Ambient Engineering through Erasmus + (Mobility for learners and staff, higher Education Student and Staff Mobility)
- Gent University, Belgium, University for Chemistry and Technology in Prague, Czech Republic and IHE Delft Institute for Water education in Delft, The Netherlands as International Master of Science in Environmental Engineering and Technology. These studies are offered as part of the Erasmus Mundus Joint master's Degree programme of the European Union.
- University for Chemistry and Technology in Prague, Czech Republic.
- IHE Delft Institute for Water education in Delft, The Netherlands as International Master of Science in Environmental Engineering and Technology.
- Poznan University of Life Sciences, Poland, Faculty of Environmental and Engineering and Protection.

Standard 5.11. Academic staff is available in sufficient time for student counselling. Each professor involved in the programme has a fixed four hour weekly consultation schedule. These consultations will ensure understanding with students and their ability to apply lessons. This consultation schedule is sometimes exceeded in case of mentoring diploma topics, research or the need of the student/instructor to achieve a satisfactory assessment result. In pandemic times (COVID-19), consultations are also offered virtually, through t GoogleMeet. Guidelines for the development of academic activities during the pandemic are set out in a decision issued by the University of Prishtina [V1].

For information on scientific achievements, students have access to the Science Direct digital library of the renowned publishing house - Elsevier (see ScienceDirect Page, UP Website:<https://www.uni-pr.edu/>). As of December 2018, electronic materials are available in the National Central Library through the LibApps platform created by the University of Prishtina within the Erasmus + project, "Library Network Support Services". More specifically, these materials can be found through the link [Home - Central University Library - LNSS Platform at LNSS Western Balkans \(libguides.com\)](#).

Through mentoring, professors provide students advice on study programme and counsel students in cases of emotional, financial or personal problems.

Performance indicator 5.3. The assessment of students in the colloquia and final exams is done according to the syllabi. The faculty at the end of each exam period reports through the quality office on student progress in various subjects. Tutorial groups are created to help students in need. Student progress for each subject is measured by the results of the first and second test, the percentage obtained in exercises, seminar papers, research, homework, and the percentage of the final exam. FCE in cooperation with the University continuously takes measures for staff training in more advanced methods and qualitative, as well as from ideas shared by professors who have collaborated with international universities.

Table 9 Number of students and graduates during the last three years at the Faculty of Civil Engineering

	Year	BACHELOR		MASTER	
		Students	Graduated	Students	Graduated
CONSTRUCTION	2019	109	72	24	14
	2020	77	59	31	20
	2021	97	66	39	15
	Year	BACHELOR		MASTER	
		Students	Graduated	Studentet	StudentTS
HYDROTECHNICS	2019	26	42	14	3
	2020	16	14	7	8
	2021	17	31	20	9
	Year	BACHELOR		MASTER	
		Students	Graduated	Studentet	Students
GEODESY	2019	38	63	19	1
	2020	51	34	20	2
	2021	38	20	19	5
	Year			MASTER	
				Graduated	Të diplomuar
ROAD INFRA-STRUCTURE	2019	0		0	2
	2020	0		0	5
	2021	0		0	1
	Year	BACHELOR			
		Students	Graduated		
ENVIRONMENTAL ENGINEERING	2019	7	7		
	2020	25	11		
	2021	16	20		

Table 10. Number of students who have dropped out of school for the last three years

Level	2017/18	2018/19	2019/20	2020/21
Bsc	23	15	19	7
Master	4	2	0	0
PhD				

SWOT analysis for Students:

A. Strengths:

- Transparent and published procedures for the admission of new students.
- A significant number of students at the bachelor level, potential to continue at the master's level.
- Small groups in lectures and exercises / practices ensuring higher efficiency.
- Involvement of students at all levels of decision-making in UP.
- Administrative support during their studies.

B. Weaknesses:

- Lack of professional counselling for students with emotional problems (psychologist).
- Lack of medical professionals on the university campus,
- Lack of scholarships for master studies.

C. Opportunities:

- ERASMUS mobility programmes for students.
- Active participation in lectures and practical trainings organized by educational support institutions.
- Development of knowledge and skills for independent research.

D. Threats:

- Insufficient support for science and research in the country.
- Student mobility to other universities due to prolonged visa procedures,

2.6 Research

Standard 6.1. The University of Prishtina, in the framework of the Strategic Plan [S2] promoted scientific and artistic research. In fact, the University of Prishtina has recently approved its regulation on financial support for research. This regulation stipulates that at least 1% of the annual budget of UP should be dedicated directly to the advancement of the research and scientific component at UP (Table below, point 1). However, FCE has advanced with scientific research supported through grants-programmes and international projects. The Faculty of Civil Engineering (FCE) has achieved that through the scientific project "InWaterSense" (Intelligent Wireless Sensor Networks for Monitoring Surface Water Quality), funded by the European Union (EU) (see Website:<https://inwatersense.uni-pr.edu/>) to realize cooperation between researchers in Kosovo from different fields, such as: Hydrotechnics, Computer Engineering, The Kosovo Hydrometeorological Institute and EU partner universities, such as: Technical University of Vienna, Tyndall Institute and Linnaeus University, are involved in the project. The InWaterSense project has provided opportunity to publish joint scientific papers by the partners involved in the project.

FCE is part of another project called "GEOBIZ" funded by the European Union under ERASMUS+ KA2 Capacity Building in Higher Education to continue raising the quality of curricula through cooperation between higher education institutions and public and private business.

The meeting "GEOBIZ Progress meeting in Prishtina" was held at the Faculty of Civil Engineering UP on 11-12 November 2021, hosting audience of 15 international universities and academic staff from the EU HEI, Western Balkans, Moldova etc.

At this meeting, the requirements of the future, technological developments and labor market requirements were presented and discussed as followed: modernization and development of a new geoinformatics / geodesy curriculum, based on EU models; coordination with technological development for academic education for institutions and businesses; addressing and implementing good practices in geoinformatics / geoinformatics with private and public business partners; active teaching and learning with interactive lectures, laboratory exercises, and fieldwork with students; evaluating mixed methods for effective implementation of learning to prepare our students - prospective experts as excellent contributors - in the fields of geomatics / geoinformation / geodesy; to promote and coordinate between the academy and business, between the private and public sectors, 6 Memoranda of Understanding (MoU) have been signed between businesses and UP, as well as 4 (MoU) between UBT and businesses.

The agreements signed between the Faculty of Civil Engineering and UBT and Business had the following profiles: 6 geodetic companies, 1 architecture, 1 construction, 1 consulting and GIS, 3 government agencies.

The project "**Enhancing Research Culture in Higher Education in Kosova (ResearchCult)**" is an Erasmus + project financed by European Commission, and is Coordinated by IBC-M. The project started in November 2019 and ends in November 2022. <https://uni-pr.edu/page.aspx?id=1.97>

For the MSc programme in "Integrated water resources management" – IWRM, as a course of study offered to all students interested in water-related studies, UP has already signed a cooperation agreement for implementation with The Swiss Agency for Development and Cooperation (SDC), through Integrated Water Resource Management-Kosovo programme, which is also the financier of the programme. The programme IWRM-K has assigned the budget of 150,000 euros for the MSc in IWRM programme implementation. This budget is dedicated to the improvement of the infrastructure for the learning and improving e-learning.

Furthermore, the IWRM-K programme has signed another agreement with TH Köln, with a 49,300 euros dedicated to the support of MSc in IWRM through the accreditation process, lectures, internship and

diploma thesis (see appendix). The programme aims to build professional capacity in the field of sustainable management of water resources at the national level. Also, the investment from SDC will be offered for hydrotechnics and environmental engineering laboratories, for equipment and for support of scientific research.

Standards 6.2. Faculty involved in the MSc in IWRM study programme are selected through policies developed by the University of Prishtina. This means that the instructors involved, in addition to the other required criteria, meet the criteria of research, scientific and professional activity in accordance with the provisions on the principles of recognition of international platforms and peer-reviewed journals, which are defined in the Regulation on selection procedures related to the appointment, reappointment and promotion of academic staff at the University of Prishtina [R2]

Standard 6.3. Policies for academic advancement are based on international peer-reviewed research indexed databases such as Science Citation Index Expanded, Social Sciences Citation Index and Arts & Humanities Citation Index, through the Web of science and Scopus (Elsevier) platforms. Research varies from field to field, and they use either data obtained in relevant laboratories (FCE or self-modeled as physical models), or data required by relevant institutions.

Standard 6.4. Academic staff extends the interest of research to that of study. For example, those whose field of interest is water treatment, conservation of water resources, have conducted research with a focus on the same areas.

Standard 6.5. The academic staff of UP, specifically FCE publishes the research in: local and international scientific journals that meet the conditions defined in the paragraphs on the Regulation of appointment, reappointment and promotion of the academic staff of UP; in local and international book chapters; at congresses, conferences, symposia, seminars and workshops locally and internationally.

Standard 6.6. The IWRM staff and students conduct research that is directly related to practical use or that is closely related to market needs and social interest. Research related to local data (existing or current) will be monitored in FCE laboratories, in particular the new laboratory being built specifically for the IWRM programme, or in laboratories of institutions with which the FCE has cooperation agreements. In this case, those data are validated for security and control of the results if there were errors in the analysis. This truth is also achieved by the experience of instructors in the developed practical professional work. When research is concerned with comparability or review of literature related to a particular issue, it is validated through scientific and applied research publications.

Standard 6.7. The academic staff at FCE, to academic quality, has the obligation to publish at least 1 paper per year, for three years. Efforts continue for more quality publications even as the pandemic has affected the academic staff research at the FCE.

Standards 6.8. The names of the University of Prishtina, those of the Faculty of Civil Engineering and the Department in particular, are specified in the published research of the academic staff of FCE. The right to financial support from UP (Regulation for financing scientific, artistic and sports research activity at UP) also belongs to the articles that carry the address of the University of Prishtina (affiliations).

Standard 6.9. To increase performance in learning, the instructor continuously integrates not only the practical professional experience into the lessons, but also informs students about topical research (as case studies) developed and published in magazines or presented at conferences. Academic research enables the programme in particular and the faculty in general to bring the same classroom research experience as a source of real-world problems and (contemporary) issues.

Standard 6.10. The UP Senate is responsible for the development of the UP intellectual property protection policy and its commercial use. According to the rights and responsibilities of the staff (provision of the Statute of UP): “academic staff has the freedom to publish the results of their research and creative

work, which is conditioned by the regulations of this Statute regarding the use of intellectual property rights for the benefit of the University ”[S1]. If the copyright and ethics in scientific publications are violated, or the trusted public funds are misused for personal gain or in the interest of other persons, the Regulation mandates disciplinary measures and procedures against the academic staff of UP [R8].

Standard 6.11. The MSc in IWRM programme concludes with the work of the diploma thesis which is individual research. Thesis work can also be organized by a group of students for research in a specific field. Part of the research is to be conducted in collaboration with the relevant company with the subject of the topic. Collaborative contact between the student and the company is achieved with the help of the advisory body within the FCE and collaborations achieved within the practical work.

Performance indicator 6.4. Promotion of and support for as much scientific research as possible is the policy of the university in. A more detailed overview of this activity is attached at the end of this report.

SWOT analysis for research:

A. Strengths:

- Progress of published works published in journals indexed in databases of trusted platforms.
- FCE cooperation with local and international institutions.
- Access to scientific journals through the Science Direct digital library provided by UP.
- Using new laboratories for scientific research.
- Good knowledge of foreign languages by academic staff and students is a necessary priority for international cooperation.

B. Weaknesses:

- Insufficient experience of international cooperation.
- Incentive for publications from UP policies, and insufficient budget from UP for research.

C. Options:

- International cooperation in projects offered by the EU, especially for the Western Balkans.
- Creating opportunities for publications through joint research projects.
- Involvement of young students and scientists in research and mobility projects.

D. Threats:

- Possible development of research through self-financing, or through research projects grants.
- The activities of the academic staff in research.
- Access to data in relevant fields of water resources, from local institutions, for research.

2.7 Infrastructure and Resources

Standard 7.1 The location of the "Technical Campus" is located in the southern part of the city of Prishtina, near the three residential neighbourhoods in the city of Prishtina - "Ulpiana", "Bregu i Diellit" and "Mati 1" and on the southern side borders with the University Clinical Center of Kosovo. The space includes an unfinished location in terms of urban development even though its surroundings have already been built in its entirety. The area of the location is about 87,000 m² or 8.70 hectares.

The Faculty of Civil Engineering is one of the academic units within the University of Prishtina which shares a common space with two other academic units: The Faculty of Electrical and Computer Engineering and the Faculty of Mechanical Engineering. All three academic units operate in a common space identified as the "Technical Faculty". The Technical Faculty owns the main building and the laboratory building. The three academic units (FCE, FECE and FME) of UP occupy the space of the main building proportionally. The total area belonging to the Faculty of Civil Engineering is about 8,600 m², including the spaces in the main building and those in the laboratory building. The surface of the main building, of approximately 5,156 m², is occupied by common spaces (corridors, stairs, toilets, library etc.), amphitheatres, classrooms, instructors' offices (cabinets), administration offices, IT office, management offices and other ancillary premises.

The space of the building of construction laboratories that is very close to the main building of the Faculty of Civil Engineering occupies an area of 3,369 m² [A40]. Laboratory of geomechanics, materials and asphalt, and of hydrotechnics and environmental engineering are laboratories for learning needs for which capital investments have been made. The laboratory of hydrotechnics and environmental engineering is located inside the Technical Faculty laboratory building and has an area of 165 m² [A41]. The laboratory is equipped with a considerable amount of equipments, which serve as laboratory experiments with students. Also, this laboratory is expected to be supplied with considerable additional equipment. The computer room is located near the laboratory and has an area of 50 m², will have 20 computers, which will be used for the work of students with software programmes and for the processing and analysis of data measured by laboratory equipment. Of course, despite the investments already made and that are constantly made, parts of the facility dedicated to laboratories are not yet repaired. Future further repairs to the premises of the facility will be necessary. The spaces in the main building of the Technical Faculty, which belong to the Faculty of Civil Engineering from the proportional division with the other two faculties (FECE and FME) are:

Level 300, which counts the classrooms, the offices of the FCE administration where student services takes place, the IT office, corridors, stairs, toilets, etc [A35];

Level 400, with the common spaces of the faculties - large corridors, sanitary joints, depots, etc. Most of the FCE administration, student services, secretary, management offices and amphitheatres (415 and partly 408) are located at this level. At this level is the main entrance to the building [A36];

Level 500 of the building with classrooms, faculty's offices, common spaces - corridors, toilets etc. At this level of the building is also the library of the faculties [A37];

Level 700, includes faculty's offices and common areas. Each full-time instructor at FCE has an office with all the necessary interior work equipment (desk, computer, printer, telephone) [A38]. Each office also has water installed. Each classroom is equipped with a projector and concretization tools for teaching.

Standard 7.2. The budget planning for the Faculty of Civil Engineering, within which the MSc of the IWRM programme is developed, also includes the financial plan that covers the expenses for staff employed in FCE (academic staff, administration, associates) and the expenses in other economic categories.

Standard 7.3. All FCE spaces are property of the UP; the Faculty of Civil Engineering does not use rented space. The campus of the Technical Faculty is used by three faculties: the Faculty of Civil Engineering (FCE), the Faculty of Electrical and Computer Engineering (FECE) and the Faculty of Mechanical Engineering (FME), 1/3 of the total space belongs to each faculty. Spaces that can not be divided proportionally in ownership are utilised by rotation proportionally in terms of time.

Both laboratory facilities and laboratory equipment are the property of the University of Prishtina. Year after year, UP partially invests in the repair and functionalization of the spaces of our facility. The servers and software owned by FCE also have a usage license. In FCE there are: the database server (resulting from the grant of the project "InWaterSense") and the server of the Geodesy Department. Some of the software owned by FCE are: GIS software, satellite image processing software (Erdas Imagine) and satellite data processing and analysis software (TTC).

Standard 7.4. The Faculty of Civil Engineering possesses considerable areas of teaching halls, laboratories, which have sufficient capacity for students. Looking at the number of active students within the FCE (total number of students in all study programmes at the FCE) about 1231 in relation to the total area of the main building belonging to the FCE is 5,156 m²/1,231, then the area of the building for one student is 4.18 m², which is a good indicator of performance.

Standard 7.5. In the library of the technical facility, there are sufficient number of places. It also possesses a considerable number of books and magazines in Albanian and English, but there is a lack of new professional texts. The reading room generally has 180 seats. Although this number of seats meets the needs of the MSc of the Integrated Water Resources Management programme in particular, it is generally not able to meet the needs of all FCE programmes. This means that it is more than necessary to expand the capacity of the library for the general needs of all study programmes in FCE.

Standard 7.6. The technical conditions offered by the technical campus (calculating the time of use of the facility from the beginning of use 1982 until today - 40 years) on average meet the work needs of our academic units. FCE together with two other technical faculties (FECE and FME) are constantly trying to adapt the infrastructure and facilities for students with special needs. The three floors of the building can be reached via a modern elevator. The ground floor and the main entrance of the building are accessible to all vehicles used by people with special needs.

In the last 5 years, investments have been made to improve working conditions and facilities. Improvements to the operation of the heating network which significantly contributed to the improvement of conditions for classroom teaching. In 2018 with World Bank funding, the energy efficiency programme, was invested in the thermal facade and windows of the building. Year after year, UP partially invests in the repair and functionalization of the spaces of our facility. In (2021) part of the laboratory of hydro-technics and environmental engineering is being renovated, as well as other laboratories.

Table 11. Faculty Infrastructure, building areas

	DEFINITION OF SPACE	QUANTITY	AREA (m ²)
1	CLASSES	21	1,450.00 m ²
2	LABORATORY	5	1,780.00 m ²
3	HALLS	2	508.00 m ²
4'	ASSOCIATION OF LABORATORY SPACE (laboratory, class *, warehouse)	6*	1,589.00 m ²
4	CABINETS	26	379.00 m ²
5	ADMINISTRATION	8	182.00 m ²
6	CABINETS	3	240.00 m ²
7	CORRIDORS+TOILETS+AUXILIARY SPACES		2,397.00 m ²

TOTAL SURFACE FOR DEPARTMENTS (FACULTY BUILDING AND LABORATORIES)	8,525.00 m²
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Table 12 Faculty of Civil Engineering Infrastructure, concretization equipment, Laboratories

	EQUIPMENT	QUANTITY
1	PROJECTOR	24
2	SMART BOARD	11
3	CONCRETE EQUIPMENT	54
4	LABORATORY EQUIPMENT (I-construction materials)	150
5	LABORATORY EQUIPMENT (II-asphalt)	32
6	LABORATORY EQUIPMENT (Hydrotechnics)	20
7	LABORATORY EQUIPMENT (MSc Geodesy)	40
8	LABORATORY EQUIPMENT (Energy Efficiency)	20
9	LABORATORY EQUIPMENT (III-Geomechanics)	70

Table 13 Faculty of Civil Engineering Infrastructure, Evidence Books.

	BOOKS	QUANTITY
1	REGISTERED BOOKS	>150
2	ELECTRONIC BOOKS	100

Note: Since 1961 the Faculty of Civil Engineering has organised studies for different levels and in every generation of students the notes are stored in our books. In our data there are more than 150 archived registry books. All civil registers this year (2021/2022) have started to be scanned and stored as electronic documents.

Table 14 Infrastructure of the Faculty of Civil Engineering

	INFRASTRUCTURE	QUANTITY
1	INTERNET (WIFI)	Everywhere
2	NUMBER OF PCS OF THE ACADEMIC STAFF	50
3	NUMBER OF STUDENT PCS	95
4	NUMBER OF ADMINISTRATION PCS	20
5	PRINTER	50
6	TELEPHONES	6
7	PHOTOCOPY MACHINES	5

SWOT analysis for infrastructure and resources:

A. Strengths:

- Sufficient space for the development of the learning process.
- Sufficient space for setting up new laboratories.

B. Weaknesses:

- Lack of scientific textbooks in the library.
- Lack of space for independent studying by students.
- Lack of staff - laboratory technicians.

C. Opportunities:

- Expand international cooperation for research and teaching.
- Increasing the accessibility of digital platforms by students - E library.
- Increasing the possibility of using the laboratories of other institutions for the development of application of certain subjects and for research.
- Increasing the number of field texts in the library.

D. Threats:

- Hiring procedures for new staff require a lot of time and can impair the process of improving working conditions for academic staff and students.

4. LIST OF REFERENCES



UNIVERSITETI I PRISHTINË
 “HASAN PRISHTINA”
 UNIVERSITY OF PRISTINA
 FAKULTETI I NDËRTIMTARISË – CIVIL ENGINEERING FACULTY
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Dekani

Prof.Ass.Dr.Florim Grajçevci

Ref. nr. _____

Prishtinë _____ 2023

For the needs of drafting an internal self-assessment report of the accreditation of the Master study programme Integrated Water Resources Management, the following are the references which help for the facts and supports that the Faculty as an academic unit of the University of Prishtina bases its activity.

LIST OF REFERENCES – SER REPORT

Table 15 List of references – SER report

A1	Monograph UP
A2	Agreement between the Faculty of Civil Engineering and the Faculty of Architecture
A3	Job Description of the Dean
A4	Decision - Academic Development Coordinator Enes Krasniqi
A5	Decision - Commission for studies in FCE
A6	Master Thesis Guide
A7	Decision for extension of the graduation term BSc MSc and PhD
A8	Statement on the prevention of nepotism at UP
A9	Decision - Appointment of the supervisor of authorized assistants for lectures
A10	Decision - Appointment of experts for the court case
A11	Decision - Appointment of the FCE Equivalence and Equivalence Commission
A12	Approval of the regulation - Amendment of the regulation no.163 15.1.2015 - Advisory body of the academic units UP
A13	CV Template of Academic Staff
A14	Employment contract Template
A15	Template part-time contract
A16	Contract for engagement with overtime Template
A17	Regulation on quality assurance and evaluation UP
A18	Guide for the evaluation of courses by students and the use of their results in UP
A19	Extension of the accreditation period for the study programmes of UP - FCE and FA
A20	Decision of the Contract Manager and decision of the Admission Commission
A21	Contract Notice - Supply of laboratory equipment for FIEK and others
A22	Contract Notice - Supply and installation of laboratory equipment for FNA
A23	Tender Dossier - Albanian Supply with Laboratory equipment for FIEK and FNA
A24	Tender Dossier-English Supply and installation of Laboratory equipment for FNA
A25	Contract and Financial Offer-Lot-2
A26	Demand - Supply of Laboratory equipment for FNA – Re-tender
A27	List of Academic Staff Hydrotechnics
A28	List of Academic Staff Construction
A29	Preliminary procurement planning - budget for 2021
A30	Rectorate request regarding the budget of 2021, 22 from FN, FIM, FIEK
A31	Requests and Forms
A31.1	Official record
A31.2	Request Form
A31.3	Form F1B Request for BSc mentor appointment
A31.4	Form F2B_Report for approval, formation of the commission and defense of the BSc diploma thesis

A31.5	Request for withdrawal of diploma thesis and decision for defence BSc
A31.6	Form F1 Request for evaluation of the project proposal of the MSc diploma thesis
A31.7	Form F1 Evaluation Report of the MSc Project Proposal
A31.8	Form F2_Request for the Formation of the Commission for the evaluation of the MSc Diploma thesis
A31.9	Form F3- Study thesis evaluation report MSc
A31.10	Form F4 -Form for the defense of the MSc diploma thesis
A31.11	Form F1 Model - Project Proposal
A31.12	Form F1.1 Model - Evaluation Report of the MSc Project Proposal
A31.13	Form F3 Model – Manuscript Evaluation Report MSc
A31.14	Form F3.1Model - Cover letter
A31.15	Form F4 Model – Form for the defense of the MSc diploma thesis
A32	Questionnaires
A32.1	Questionnaire for academic staff - Albanian
A32.2	Questionnaire for academic staff - English
A32.3	Subject evaluation questionnaire - Albanian
A32.4	Subject evaluation questionnaire - English
A32.5	Questionnaire for Bachelor students – English
A32.6	Questionnaire for Bachelor students – Albanian
A32.7	Questionnaire for the administrative and support staff of the university – Albanian
A32.8	Questionnaire for administrative and support staff of the university English
A33	Template, Certificate of training of academic staff
A34	Planned budget 2021,2022,2023
A35	Planimetry of the faculty building-Floor 3
A36	Planimetry of the faculty building-Floor 4
A37	Planimetry of the faculty building-Floor 5
A38	Planimetry of the faculty building-Floor 7
A39	Suterren-Laboratories and Classrooms
A40	Ground Floor-Laboratories and Classrooms
A41	Laboratories and Classrooms - 1st floor
A42	Learning agreement Student Mobility for Studies
A43	Scientific publication list – IWRM Academic Staff
A44	Annual Report FCE 2021
TABELA 4	
Statute and Strategy Plans	
S1	Statute of the UP
S2	Strategic plan of the UP
S3	Strategy of the FCE
Frameworks	
K1	National Qualifications Framework
K2	Framework of Qualifications for the European Higher Education Area
Regulations	
R1	Regulation on re-accreditation preparation procedures at the UP
R2	Regulation on selection procedures related to the appointment, reappointment, and promotion of academic staff at UP
R3	Regulation of the evaluation procedures for the engagement of external faculty in UP
R4	Regulation for the financing of the research activity - scientific, artistic, and sports in UP
R5	Regulation for Master of Science degree studies
R6	Regulation on the electronic system for student management (SEMS) at UP
R7	Regulation on academic mobility of students
R8	Regulation on disciplinary measures and procedures applicable to the UP academic staff
R9	Regulation on the procedures and disciplinary measures applicable to the UP students
R10	Regulation on the election procedure, establishment, and functioning of the student parliament (SP) and student councils (SC) of the UP

R11	Regulation on the structure and working principles of the center for excellence in teaching at UP
R12	Regulation on personal income of academic staff, allowances by functions, and other compensations in UP
R13	Regulation of quality assurance and quality assessment at UP Nr. 4/132 Dt. 30/12/2016
R14	Regulation for amending Regulation no. prot. 2-543, dated 22.10.2021, for personal income of academic staff, allowances according to functions and other compensations at the University of Prishtina
Decision	
V1	The UP Senate's Decision to formalize instructions for conducting academic activities during the COVID-19 pandemic
V2	MSc in IWRM Programme Holders
V3	MSc in IWRM Programme Coordinator
V4	Completion of SER – decision on further procedures at the Academic Office for Development
Administrative Instructions/Regulations	
U1	Administrative Instruction from MESTI for accreditation of higher education institutions
U2	Administrative Instructions for Revising and Reviewing the Syllabi
U3	Guideline for course evaluation by students and the usage of the results
Other	
T1	Quality assurance at the University of Prishtina
T2	International cooperation
T3	Cooperation agreements in the FCE
T4	Code of Ethics of the academic staff
T5	The FCE Advisory Body (AB)
T6	Alumni Community
T7	Student Council
T8	Center for Career Development
T9	e-Career
T10	Research infrastructure at the UP
T11	Introductory call for expression of interest in introducing a IWRM Master Programme
T12	Application for the Master Programme – IWRM
T13	Letter of Agreement - IWRM-K and UP
T14	Public Presentation of IWRM Programme
T15	Letter of agreement between The Integrated Water Resource Management in Kosovo Programme and Technische Hochschule Köln/Institute for Technology and Resources Management in the Tropics and Sub-tropics
T16	Memorandum of Understanding between Technische Hochschule Koln, Faculty of Spatial Development and Infrastructure Systems and University of Prishtina
T17	Memorandum of Understanding between -Faculty of Civil Engineering University of Prishtina "Hasan Prishtina" and Faculty of Environmental and Mechanical Engineering, Poznan University of Life Sciences, Poland 22.03.2022.
T18	Erasmus+, Mobility for Learners and Staff, Higher Education Student and Staff Mobility. Inter-Institutional agreement 2020-23, between Institutions from Programme and Partner Countries, Università degli Studi di Trento/Italia and University of Prishtina. Signed on date 02 March 2021.
T19	Erasmus+, Mobility for Student and Staff, Higher Education Student and Staff Mobility. Inter-Institutional agreement 2022-24, between Institutions from Programme and Partner Countries, University of Natural Resources and Life Sciences, Vienna and University of Prishtina, Faculty of Civil Engineering.

IWRM PROGRAMME HOLDERS:

IWRM programme holders are:

- I. Prof. Dr. Laura Kusari
- II. Prof. Ass. Dr. Lavdim Osmanaj

Table 16 Publication data for IWRM programme holders

Prof. Dr. Laura Kusari	Prof. Ass. Dr. Lavdim Osmanaj
<p><i>Flow Rate Determination as a Function of Rainfall for the Ungauged Suhareka River</i></p> <p>Laura Kusari, Lavdim Osmanaj, Hana Shehu, Samir Bungu</p> <p>JOURNAL OF ECOLOGICAL 2021</p> <p>J. Ecol. Eng. 2022; 23(4):110–121</p> <p>SCOPUS</p> <p>http://www.jeeng.net/pdf-14635572843?file-name=Flow%20Rate%20Determination.pdf</p>	<p><i>Flow Rate Determination as a Function of Rainfall for the Ungauged Suhareka River</i></p> <p>Laura Kusari, Lavdim Osmanaj, Hana Shehu, Samir Bungu</p> <p>JOURNAL OF ECOLOGICAL 2021</p> <p>J. Ecol. Eng. 2022; 23(4):110–121</p> <p>SCOPUS</p> <p>http://www.jeeng.net/pdf-146355-72843?file-name=Flow%20Rate%20Determination.pdf</p>
<p><i>Waste Disposal Impacts on Surface Water Quality</i></p> <p>Laura Kusari</p> <p>Waste Technology (WasTech) - An International Journal Doaj</p> <p>https://ejournal.undip.ac.id/index.php/wastech/author/mission/17371</p>	<p><i>Determination of Groundwater Protection Zones of the Pozharan Wellfield Using Hydrogeological Modflow Model</i></p> <p>Lavdim Osmanaj, Argjend Hajra, Afrim Berisha.</p> <p>JOURNAL OF ECOLOGICAL 2021</p> <p>SCOPUS</p> <p>http://www.jeeng.net/Author-Lavdim-Osmanaj/161617</p>
<p><i>Solid Waste Management for Surface Water Quality Protection</i></p> <p>Laura Kusari</p> <p><i>International Journal of Environmental Quality</i></p> <p>Web of Science</p> <p>https://eqa.unibo.it/article/view/7886</p>	<p><i>The Journey of Establishing Groundwater Source Protection Zones in Kosovo on the Example of Lipjan/Lipljan Municipality</i></p> <p>Lavdim Osmanaj, Argjend Hajra, Afrim Berisha, Thomas de Beyer</p> <p>Ecological Engineering & Environmental Technology</p> <p>SCOPUS</p> <p>http://www.ecoet.com/Author-Lavdim-Osmanaj/161617</p>
<p><i>Development of Water Quality Matrix through Surrogate Modeling</i></p> <p>Laura Kusari</p> <p><i>International Journal of Environmental Quality</i></p> <p>Web of science</p> <p>https://eqa.unibo.it/article/view/7735</p>	<p><i>Determination of Methane Explosion Level in the Velekince Municipal Solid Waste Landfill</i></p> <p>Afrim Berisha, Lavdim Osmanaj,</p> <p>Ecological Engineering & Environmental Technology</p> <p>SCOPUS</p> <p>http://www.ecoet.com/Determination-of-Methane-Explosion-Level-in-the-Velekince-Municipal-Solid-Waste-Landfill,139407,0,2.html</p>

<p><i>Regression Model as a Tool to Predict Concentrations of Total Suspended Solids in Rivers</i></p> <p>Laura Kusari</p> <p><i>International Journal of Environmental Quality</i></p> <p>Web of science</p> <p>https://eqa.unibo.it/article/view/6865</p>	<p><i>Kosovo Scenario for Mitigation of Greenhouse Gas Emissions from Municipal Waste Management</i></p> <p>Afrim Berisha, Lavdim Osmanaj,</p> <p>EVERGREEN Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, Vol. 08, Issue 03, pp00-00, September 2021</p> <p>SCOPUS</p> <p>http://www.tj.kyushu-u.ac.jp/evergreen/contents/EG2021-8_3_content/pdf/509-516.pdf</p>
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