

# **REPORT OF THE EXPERT TEAM ON RE-ACCREDITATION PROCEDURE OF MASTER PROGRAMS AT FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE, UNIVERSITY OF PRISHTINA**

(Based on site visit on 5<sup>th</sup> June 2017)

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Study programs:       Hydrotechnics MSc  
                              Constructions MSc

The site visit held in the Faculty of Civil Engineering and Architecture, 5 June 2017. There was a meeting with faculty management (dean professor A. Zejnullahu, vice-dean associate professor V. Nushi, vice-dean assistant professor K. Morina and coordinator for academic development assistant professor A. Basha-Jakupi). After that, meeting with representatives of the master programs Construction (professor N. Kabashi, associate professor M. Misini and assistant professor F. Grajcevcic) and Hydrotechnics (associate professor Z. Idrizi, assistant professor L. Kusari) took place. Inspection of the main building and laboratories followed. In the afternoon, meeting with a group of academic staff and a group of students held. The experts would like to express their acknowledgement to the staff of KAA for their help during the site visit.

## **1. Comments common to Hydrotechnics and Construction master study programs**

Self evaluation report of the Faculty of Civil Engineering and Architecture of the University of Prishtina (2017) suffers from many inaccuracies and poor formal quality. The text was not checked by a spell-checker and there are paragraphs with every third word incorrectly written. Tables do not have captions and it is difficult to understand their content. Lists of names are not ordered alphabetically which extremely complicates the work with the report. Many paragraphs are doubled in the report which is useless. There are many Albanian words not translated, e.g. in tables (it is not the case of appendices, where copies of documents in Albanian language are attached). The lists of publications of the academic staff in the last three years contain many publications older than three years. Moreover, there are 17 journal papers and 29 conference contributions with no connection with Construction or Hydrotechnics study programs. The rejected publications are mainly devoted to architecture and therefore they are irrelevant for this re-accreditation. References to literature recommended to students have to be written in the standard format, i.e. authors, title, publisher and year. Inaccuracies will be mentioned when needed.

### **1.1. Staff**

Division of the staff into groups of professors, associate professors, assistant professors, lecturers and assistants is not clearly defined. Appendix (procedur) even more complicates the understanding. In the future, the particular categories have to be precisely defined. Nevertheless, every bachelor and master study program has to be guaranteed by a full professor which is not satisfied at this

moment. From the discussion with staff follows that carrier growth is very slow because of the rules of the University of Prishtina. Moreover, the rules were changed which complicates the situation. The document describing the carrier growth in the University of Prishtina is vague because the term International scientific journal is not defined. Is it a journal with impact factor? Is it a reviewed journal? Also the formulation High educational and pedagogical skills is very fuzzy. The system of carrier growth (from assistant professor to associate professor, etc.) of the staff of FCEA is not defined.

**Recommendation:** The University of Prishtina has to clarify the system of carrier growth. It should be subject of its accreditation. The staff of FCEA has to improve its educational level, i.e. in the ideal case, all teachers have to be Ph.D. The FCEA needs full professors in engineering specializations which will guarantee all study programs. There should be approximate plan of carrier growth.

With respect to recommendations mentioned in previous reports, several academic staff started to publish their results in international journals indexed in databases Thomson Reuters and Scopus. This activity is highly appreciated by experts.

**Recommendation:** The staff should continue in this process and additional teachers should join them.

## 1.2. Infrastructure

Significant improvement has been seen because the facade of the main building of the FCEA is reconstructed. The new facade is insulated and completely new windows are installed. Also large reconstruction is taking place in several lecture rooms and in the entrance hall. Nevertheless, there are still many rooms, lifts and staircases which urgently need exhaustive reconstruction because they are far away from European standards. Such reconstruction needs assistance of the central management of the University of Prishtina or the Ministry of Education.

**Recommendation:** The reconstruction of the FCEA building has to continue.

Library of the FCEA does not fulfill European standards. Although this problem was mentioned in many previous reports dealing with accreditation, the improvement is very slow and it will cause one of the main obstacle for accreditation of master programs in future. Without significant improvement of the library, no PhD program will be permitted.

The amount of modern textbooks and monographs is slightly growing but there are not enough textbooks published recently by academic staff of FCEA. The main objection is connected with no access to electronic international journals or sources of information. At this moment, there is no access to full texts. It is not cheap but it is necessary assumption for improvement of the level of the faculty.

**Recommendation:** Detailed survey of existing electronic journals and sources has to be done. Access to the journals with the highest overlap with the FCEA mission has to be negotiated. At least several copies of textbooks written by academic staff of FCEA should be bought to the library.

Another important issue is the quality of laboratories located in the next building to the main FCEA building. In comparison with the main building, the laboratories are in catastrophic conditions. Only few particular rooms are reconstructed and reasonably equipped (e.g. laboratory of geodesy).

Majority of the laboratories are in very bad conditions. The management informed the experts that the FCEA asked the Ministry of Trade and Industry for accreditation of the laboratories also for commercial purposes which potentially improve collaboration with industry and it could esteem the position of the faculty but the laboratories can be hardly accredited for industrial purposes in the present form.

**Recommendation:** As many as possible laboratory rooms have to be reconstructed. Detailed analysis of curricula together with requirements on national accredited laboratory have to result in decision which laboratory will be equipped with modern devices first.

### 1.3. Students

The numbers of students graduated from the master programs of the FCEA summarized on pages 111 and 112 of the self-evaluation report are strange. There are about 200 students in the program Construction but only 5 of them are graduated every year. In the case of Hydrotechnics, there are about 90 students but only 1 is graduated during a year. These numbers are very far from standard conditions and responsible persons (associate professor M. Misini, assistant professor F. Grajcevcic for Construction and associate professor Z. Idrizi, assistant professor L. Kusari for Hydrotechnics) have to explain them.

### 1.4. Finances

The total budget of the FCEA for the year 2016 is 165 000 EUR. The cost for building is 70 000 EUR. The revenue budget for the study programs Construction and Hydrotechnics is 100 000 EUR (on page 150 of the self-evaluation report). It is impossible because the budget without costs for building is 95 000 EUR and there are also other study programs.

### 1.5. Research and International-Cooperation

Research of the staff is summarized in the list of publications. It is appreciated that some of them are in the internationally recognized databases. There is cooperation with various institutions mainly in neighboring countries. Several Ph.D. students study in Milan, Skopje, Sarajevo and Tirana. Lecturers from foreign countries take occasionally part in the teaching.

**Recommendation:** With respect to the orientation of Kosovo to EU, additional contacts with institutions from EU countries is recommended.

## 2. Construction master study program

The master study Construction was represented by professor Naser Kabashi, associate professor Misin Misini and assistant professor Florim Grajcevcic. The meeting started with analysis of recommendations mentioned in the last report dealing with re-accreditation.

Recommendation 1 dealing with modern fields, e.g. glass constructions, light-weight constructions, etc. was partially satisfied. New courses were introduced, namely Polymer and bituminous

materials, Light steel structures, Laminated wood constructions and Project management. Curricula of the course Light steel constructions is not included in the self-evaluation report. In contrary, there are courses Building physics and Environmental protection which are not in the master program but in the bachelor one which is not subject of re-accreditation. Some topics recommended by experts are not covered at this time but the offer of the obligatory and elective courses is reasonable. New courses should be consulted with the Advisory board which was established in 2015.

Recommendation 2 dealing with laboratories was not understood well by the FCEA. In the last report, experts recommended reconstruction of laboratories and to furnish them. The rooms were not reconstructed and only few new devices were installed.

Recommendation 3 dealing with cooperation with universities in central Europe was only partially satisfied. Within last 3 years, only one memorandum of understanding was established and is included in the self-evaluation report, namely with the Dortmund University of Applied Sciences and Arts. Cooperation with universities from neighboring countries is understandable but new intensive cooperation with universities from EU countries is required with respect to the orientation of Kosovo to EU.

Recommendation 4 dealing with accreditation of laboratories for industrial purposes was satisfied because the FCEA applied for the accreditation by the Ministry of Trade and Industry. On the other hand, without significant improvement of the laboratories, it is hardly believable that the accreditation will be assigned.

Recommendation 5 dealing with participation in European project Horizon 2020 was not fulfilled but it is very difficult task and it takes very long time. First necessary steps were done.

## 2.1. Academic Program and Student Management

The master study program Construction is in accordance with the FCEA mission to provide professional staff for the market of construction engineering. Obligatory and elective courses are in accordance with European standards. Curricula of many of the courses are motivated by courses taught in foreign universities, e.g. Ruhr-Universität Bochum, University of Zagreb, University of Ljubljana, Technische Universität Vienna. The numbers of ECTS of particular courses are reasonably assigned and an example of the ECTS computation is included in the self-evaluation report.

Course titles are mentioned in section 2.1.13 Study plan on page 18, in section 2.1.14 Course description on pages 20-52 and on pages 156-159 of the self-evaluated report. In many cases, the titles are different in particular pages. For example: Laminated wood structure on page 18 but Laminated wood constructions on page 156. Curricula of the courses Technical English language I, Light steel structures and Technical English language II are missing in section 2.1.14.

**Recommendation:** Titles of courses have to be strictly defined and used in all materials. Detailed curriculum (one item for every week of study) of every course has to be assembled. There should be one responsible teacher assigned to every course (the course can be taught by several teachers but only one has to be denoted as the responsible person).

In the master program Construction, 50% of the obligatory courses are taught by permanent staff and 50% of them are taught by staff from different faculties of the University of Prishtina. This ratio is not acceptable over a long time period. Also in elective courses the number of external teachers is relatively high.

**Recommendation:** More courses, especially the obligatory courses, have to be taught mainly by the permanent staff of the Faculty of Civil Engineering and Architecture.

There is a discrepancy connected with the requirements to admission to the master program between the discussion with professor Naser Kabashi, associate professor Misin Misini and assistant professor Florim Grajcevcic during the site visit and the self-evaluation report. Students with GPA greater or equal to 7.5 are admitted to the master study directly with respect to the self-evaluation report while during the site visit we were informed that all students have to pass admission test.

## 2.2. Staff

Please, see the subsection 1.1. Staff in section 1. Comments common to both programs.

## 2.3. Research and International Cooperation

Please, see the subsection 1.5. Research and International Cooperation in section 1. Comments common to both programs.

## 2.4. Finances and Infrastructure, Space and Equipment

Please, see the subsection 1.4. Finances and Infrastructure in section 1. Comments common to both programs.

## 2.5. Quality Management

The study program is consulted with Advisory board which includes external experts as well as internal staff. The teaching process is regularly evaluated by students. The group of students which took part in the meeting with experts were satisfied with the quality of the study.

## 2.6. Experts' Recommendation to KAA

<p><b>The experts recommend to re-accreditate the master study program Construction for the period of three years.</b></p>
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### 3. Hydrotechnics master study program

The Hydrotechnics MSc program was represented on the morning interview by Dr Laura Kusari, Dr Naim Hasani and Dr Zekrija Idrizi. The meeting started with analysis of recommendations mentioned in the 2014 report dealing with re-accreditation.

The proposed courses, respectively wastewater treatment and GIS system have been introduced in the curricula.

In the field of hydrotechnics the Water Sense Project has been carried out, providing professional opportunity for the staff in applied research. The results and the infrastructure of the project enable further research activity in this field.

In the area of international cooperation there is no significant advancement. We suggest that staff and students of the program should be more involved in ERASMUS exchanges to trigger possible cooperations.

For the development of the Hydrotechnics Laboratory there is a proposal of a development plan of 55 000 EUR. Unfortunately there is no detailed plan presented in the self-evaluated report, and during the meeting it became clear, that presently this development plan has not been approved by the management of the university. Hence this development plan might be a possibility, but cannot be taken into account in the evaluation process.

Concerning staff development, the number of staff is increased by one PhD. Considering the lack of doctoral school in the field of water or civil engineering in Kosovo, even a single new PhD is very valuable and to be appreciated.

#### 3.1. Academic Program and Student Management

Hydrotechnics MSc is a two year, 120 ECTS study program. The scope and structure of the program corresponds well to the present international practice.

We consider the number and distribution of the courses adequate among the semesters. The courses cover all major areas of water engineering. The proportion of practice and theory is adequate. We were informed, that there are regular site visits in order to familiarize students with the practical engineering applications. Due to the lack of university laboratories students complete their practical courses in some external laboratories (e.g. in the field of meteorology and water quality). It is acceptable, but laboratory development should be the core of the university development plan in the near future.

During our meeting with the responsible staff one aspect became apparent which is to be improved: the lack of modeling software applications in the courses. In the field of hydrology and hydraulics there has been a significant change in the last 3 decades: all relevant calculations are carried out by specific modeling software applications, and the basic, simplified classical engineering methods are neglected. Unfortunately at University of Prishtina in the Hydrotechnics MSc course these contemporary design and modeling methods are not used. As we were informed during the meeting, the reason of this is that the staff is not familiar with them. We consider this very unfortunate, and a very bad point of view indicating the lack of professional staff development in this regard. We advise very strongly, that these contemporary, numerical methods are to be introduced in the courses, with the emphasis on 4 areas: urban runoff, drinking water distribution, groundwater

hydraulics and open channel hydraulics. For all of these areas there are excellent, free software applications available, which means that their introduction does not require any financial investment from the faculty. But it requires the effort from the staff to learn to use and apply them in real engineering projects. Without incorporating these methods in the curricula the remark of the 2014 assessment report, that the curricula is “*a little bit old fashioned*” can clearly be understood, as it reflects to the water engineering inventory of the 80’s.

The program is designed for 20 students per year. As we were informed during the student meeting, there is a high demand from BSc Hydrotechnics graduates to continue in the MSc program, and it is not easy to be enrolled. It would be worthwhile for the Faculty to investigate the possibility to increase the admission number.

It was apparent during our meeting with students that they are proud of being students of UP and the Faculty. The student-teacher relationships seems to be collegial, and students appreciated the helpfulness of the staff on the general level.

### **3.2. Staff**

In addition to the subsection 1.1. Staff in section 1. Comments common to both programs:

There are PhD level staff members assigned to all the technical courses in the curricula, which is fairly positive. It is advisable that the promotion of the major course responsible into full professorship to be supported by the University.

### **3.3. Research and International Cooperation**

Please, see the subsection 1.5. Research and International Cooperation in section 1. Comments common to both programs.

### **3.4. Finances and Infrastructure, Space and Equipment**

As it has already been mentioned, the development of the Hydrotechnics laboratory is crucial for the future of this MSc program. During our laboratory visit we were shown a design plan of an open channel hydraulic model. There is ambient space available for this in the laboratory building, and we also noticed the willingness from the laboratory staff to build it. We recommend that the University should allocate a feasible but reasonable budget for the laboratory, in order to enable a step by step development, including the establishment of open channel hydraulics, groundwater hydraulics and water quality facilities.

### **3.5. Quality Management**

The study program is consulted with Advisory board which includes external experts as well as internal staff. The teaching process is regularly evaluated by students. The group of students which took part in the meeting with experts were satisfied with the quality of the study.

At the same time the reason of the low number of graduates per year should be thoroughly investigated and tackled. We were informed, that this low number is due to the fact that students work beside their studies, and therefore the last semester, the thesis preparation usually takes longer than half a year. Nevertheless, we still are not completely convinced that it is fortunate: the number of graduates of the program in relation to the enrolled number is an important quality indicator, which is not favorable here.

We were shown 3 thesis documents of Hydrotechnics MSc, which were of adequate quality.

### 3.6. Experts' Recommendation to KAA

**The experts recommend to re-accreditate the Hydrotechnics master study program for the period of three years.**

In Budapest and Prague  
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