

Doc. 300.3.2

07.14.313.003

## Higher Education Institution's Response (Departmental)

Date: 02/07/2021

- **Higher Education Institution:**  
Frederick University
- **Town:** Nicosia
- **School:** Engineering
- **Department:** Civil Engineering
- **Programme(s) of study under evaluation**  
Name (Duration, ECTS, Cycle)

### Programme 1

#### **In Greek:**

Πολιτική Μηχανική (3 ακαδημαϊκά έτη, 180 ECTS, Διδακτορικό (PhD))

#### **In English:**

Civil Engineering (3 academic years, 180 ECTS, Doctorate (PhD))

### Programme 2

#### **In Greek:**

Δομοστατική Μηχανική (3 ακαδημαϊκά εξάμηνα, 90 ECTS, Μάστερ (MSc))

#### **In English:**

Structural Engineering (3 academic semesters, 90 ECTS, Master (MSc))

### **Programme 3**

#### **In Greek:**

Πολιτική Μηχανική (4 ακαδημαϊκά έτη, 240 ECTS, Πτυχίο (BSc))

Κατεύθυνση:

- Επιμετρητής Ποσοτήτων

#### **In English:**

BSc Civil Engineering (4 academic years, 240 ECTS, Bachelor (BSc))

Specialization:

- Quantity Surveying

**Department's Status: Currently Operating**

**The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the “Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws of 2015 to 2019” [N. 136 (I)/2015 to N. 35(I)/2019].**

## A. Guidelines on content and structure of the report

- *The Higher Education Institution (HEI) based on the External Evaluation Committee's (EEC's) evaluation report (Doc.300.3.1) must justify whether actions have been taken in improving the quality of the department in each assessment area.*
- *In particular, under each assessment area, the HEI must respond on, without changing the format of the report:*
  - *the findings, strengths, areas of improvement and recommendations of the EEC*
  - *the deficiencies noted under the quality indicators (criteria)*
  - *the conclusions and final remarks noted by the EEC*
- *The HEI's response must follow below the EEC's comments, which must be copied from the external evaluation report (Doc. 300.3.1).*
- *In case of annexes, those should be attached and sent on a separate document.*

## 1. Department's academic profile and orientation

### **Sub-areas**

- 1.1 **Mission and strategic planning**
- 1.2 **Connecting with society**
- 1.3 **Development processes**

### **Areas of improvement and recommendations**

- 1.1 A formal alumni center should be established (this is already in the works).
- 1.2 Could be effective to consider hiring 1-2 additional visiting professors to ensure complementary course offerings of interest. However, for the bachelor program this is not necessary

### **Department's Response:**

- 1.1 The establishment of an Alumni Association has already been recognized by the Department as an important parameter for its development. Towards this end, the Department has already initiated a formal dialogue with its alumni. To further strengthen this dialogue the Department has organized, with the support of the University, social gatherings of its alumni, through which the establishment of a nucleus for the creation of a Central Council of an Alumni Association was pursued. Further actions are anticipated in the forthcoming months by the aforementioned identified alumni. The Department remains at the availability of the interested alumni to foster the process that has been initiated.
- 1.2 As discussed with the EEC, the Department is fully supportive of introducing visiting professors for the delivery of its programs of study, as such actions would further complement the educational experience of the students and would support the development of academic collaborations. The Department has already contacted a number of collaborating professors (from various universities from abroad) who enjoy global recognition in their respective fields for the teaching of specific courses in our Programs of Study. Examples of contacts made include faculty members from such universities as the Technical University of Crete, University of Malta, National Technical University of Athens, and Portsmouth University (UK). A recent addition to the ranks of the Department (with regards to Visiting Professors) has been the involvement of

Transportation Engineering Professor Nikolas Eliou (from the University Thessaly, in Greece) in the teaching of pertinent courses in our Program of Study (i.e. Highway Engineering) (Annex 01, CV) and Dr Marios Soutsos (Annex 02, CV) from Queen's University Belfast, in the specialization of Structural Engineering and Concrete Technology.

## 2. Quality Assurance

### **Sub-areas**

#### **2.1 System and quality assurance strategy**

#### **2.2 Quality assurance for the programmes of study**

### **Areas of improvement and recommendations**

2.1 It is suggested that the members of the Department engage in a more frequent communication with the representatives of the Scientific and Technical Chamber of Cyprus (ETEK) for potentially new course offerings of interest to the profession. Such an explanation and discussion with ETEK would be beneficial for both parties.

### **Department's Response:**

2.1 The following two items cater towards a better exchange between the Department and ETEK:

- Many of the faculty members of the Department are already serving in several of ETEK's Scientific Committees. These participations facilitate a more direct dialogue, and a more direct involvement of the Department with the professional community of Cyprus. For instance, discussions within ETEK's ad-hoc Committee on Environmental Engineering have already been initiated with regards to the selection of courses that are required of a new member of the Chamber of Engineers in the given specialization. Such discussions are inevitably translated to possible new courses within the Department.

- In addition to the aforementioned actions, the Department has proposed that a representative of ETEK is included in its External Advisory Board. This inclusion will solidify and reinforce the existing exchanges on issues of teaching and research between the Department and ETEK.

### 3. Administration

#### Areas of improvement and recommendations

3.1 Consider increasing the number of Erasmus students

#### Department's Response:

3.1 The Department's Erasmus Program Coordinator, in coordination with the University's Erasmus Program Officers, have initiated a campaign through which European Universities that offer their programs of study in Civil Engineering in the English language are identified and solicited. The ultimate goal is for new Collaboration Agreements to be signed. Such new collaborations will allow more avenues for exchanges of students under this Program

### 4. Learning and Teaching

#### Areas of improvement and recommendations

As shown above the Department has scored very well in the previous categories. If there is a room for improvement that would be related to the BSc admissions policy. However, the Committee recognizes that:

4.1 Definitions of a minimum entry requirement may be difficult to implement in practise from students coming from different educational systems. This is a Private University in a system where state-funded Universities are also of very high level and are free of tuition. The policy on this matter of this Department agrees with the policies followed by other, and hence competing, Private Universities in Cyprus. The Department mitigates risks to students through the maths entry (and secondary the English entry) exam. The Department follows an honest policy of advising students that perform

unsatisfactorily on the above exams about them being placed in a preparatory route involving a reduced load in the first years before they are admitted. The Department is not near the limit set by the University which is 50 students admitted per year. Nonetheless, the Department can consider a policy where students that show evidence that they would not cope with the requirements of the degree, even despite any help in the first years, are not admitted. The Committee has no strong feelings on this matter for the previous reasons mentioned, but the members believe that a minimum entrance mark or a pass/fail level mark for the maths (and English) entry exam/or some other policy could be helpful in such cases. The Committee did not see evidence that students who would fall in this category, are currently being admitted.

#### **Department's Response:**

4.1 The Department is happy that the EEC identifies a series of steps are taken to support student intakes and mitigate admissions risks. Even though the EEC does not have a firm position on further restricting entrance criteria, we adopt policies to minimum entrance requirements as follows:

- A minimum school leaving certificate of 80%, or equivalent, and
- A minimum grade of 75% in Mathematics or Physics in the school leaving certificate, or equivalent
- Students that fail to meet the above criteria may be admitted if they succeed in the university's entry exams in mathematics conducted each September, or if they successfully complete the Engineering foundation program operated by the School.

## 5. Teaching Staff

### Areas of improvement and recommendations

- 5.1 While the department is currently running in a fairly optimal way, the hiring of 1-2 visiting professors could be an asset to maintain the existing trajectory and achieve even more over the next few years.

### Department's Response:

- 5.1 This Department agrees with the EEC and responded as indicated in item 1.2 of this response. It is also our intention to invest and expand on the visiting professor network over the next few years.

## 6. Research

### Areas of improvement and recommendations

- 6.1 The PhD program is relatively recent (it started in 2015). The Department is making an active effort to increase the number of PhD students. The Committee members feel that this is a step in the right direction. There will be many benefits from this growth for the Department in terms of it improving its research capacity and competitiveness at all levels. The University should support this effort..

### Department's Response:

- 6.1 We are happy that the Committee's findings are positive in relation to the Department's efforts towards further strengthening our PhD Program of Study. The University has already established mechanisms through which it is anticipated that higher numbers of highly qualified PhD candidates will be attracted to our PhD Program of Study.

Specifically, admitted PhD students receive

- a) a tuition waiver for their studies,
- b) access to the Internal Research Funding Scheme of the University, which funds research based on an annual call for proposals within the University,

- c) teaching assistantships (i.e. salary earned for participation as tutors in the Peer Tutoring Center of the University),
- d) basic infrastructure that is necessary for completion of PhD-level studies (e.g. office space, computers and software, access to libraries, access to laboratory facilities and consumables, etc.)
- e) research assistantships (i.e. salary earned for participation in funded research projects of faculty members)

## 7. Resources

### 7.1 Quality Indicators / Criteria

7.2	The Department follows sound and efficient management of the available financial resources in order to develop academically and research wise.	3
<p><i>In 7.2, the grading of 3 is only related to research (in the PhD program), which at the moment is evolving and it has a promising trajectory given the focus of the department, which is on teaching. Moreover, the data are not sufficient to further support a higher score. However, to be fair this should be carefully evaluated in the next revision as the results from the investment in the PhD program will be more evident after at least 5 years</i></p>		

### Areas of improvement and recommendations

7.2 Probably a stronger connection with external universities should be encouraged.

### Department's Response:

- 7.1 In relation to the grade obtained for the management of the financial resources (Quality Indicator 7.2). As discussed with the EEC, indeed, the Department does not maintain its own budget. The reasons for that include the following:
- a) The University considers that it is more efficient to maintain some financial aspects centrally as this approach reduces the administrative overheads and allows for a more efficient use of its financial resources. The Department recognizes these facts and adheres to clear and established procedures through which the Department secures annual budget approval in relation to important academic matters such as

staff development costs; consumables, equipment and other infrastructure resources; and outreach activities to the community.

- b) In other areas, such as the research support initiatives, the University maintains a separate budget that is managed by the Senate's Research Committee, hence it maintains a University-wide development policy.

This centralized system is considered effective and efficient.

- 7.2 Internationalization and collaboration with other universities in Europe and beyond is a key objective of the Department. This is also evident from the growing collaborations with universities in the fields of staff and student exchange, but more importantly, in research projects (recent examples include the ISTOS, DEFEAT, and INVALIDOR projects). The aim of the Department is to further strengthen this direction. The Department is actively exploring the development of joint degrees (for example, a connection through the Technical University of Civil Engineering Bucharest has been initiated under the umbrella of the EU-Connexus Program in which we are participating).

## B. Conclusions and final remarks

1. The members of the committee found the policy followed by the Department in all the above categories to be compliant.
2. The Departments ensures a good mix of theory and practical courses and implements good connections between students and industry. There is a mixture of courses of high importance to both theory and practise, such as the design of masonry and timber structures. There are also courses related to BIM which are very useful for practise and theoretical courses on earthquake engineering. These courses match the expertise of the teaching staff, and are also occasionally covered by visiting professors. There is a dedicated MSc on structural engineering which is built around the expertise of the faculty.
3. The committee considers that further appointment of 1-2 visiting professors could benefit the Department so as to cover more courses. The Department appears to be in communication with ETEK and the Committee believes that further communication between the two parties will continue to benefit the development of the curriculum over the following years. The Department assures Quality through following a series of forms.
4. Stakeholders are involved in this process, e.g., student representatives, as well as ETEK representatives.
5. Several of the members of the faculty are involved in European projects and this is very positive. The Department also applies a series of policies that help the students such as the peer-supervision system and the student's advocate systems. The welfare and library officers support the students very well. The hybrid teaching classrooms have received very positive feedback from the students and indeed appeared modern and spacious (albeit this is a virtual assessment).
6. The Department follows very good accreditation policies for all degrees. The admissions for MSc and PhD are also very well defined. The Department is following a maths examination for entry to the BSc which is a good policy to classify students. There is also a mechanism of preparatory courses to help students that perform less well on the exam. This could be beneficial to students coming from disadvantaged backgrounds. The Committee has suggested that the Department can consider setting rejection criteria for students that would struggle with the requirements of the degree.

7. There is a good ratio of teaching staff to students. The programmes are in English which allows for international students attending. The students commented very highly on the office hours policy followed by the lecturers. Further growth of the Department might be temporarily accommodated by increasing the number of visiting professors or permanent staff.
8. The Department started admitting PhD students in 2015. Despite that they have achieved reasonably well in terms of publications and have secured 1,5 million Euros since 2015. The labs are reasonable for a Department of this size, they are optimized for the needs of the members and any additional requirements are covered through students visiting other Universities. There is one graduated PhD student and 6 active. The Departments wants to grow in this area and the Committee is supporting this direction. It would be beneficial to the Department and would allow an increase of research outputs and funding.
9. Recommendations:
  - The University should support the Department in the growth of the PhD programme.
  - Increase of the number of visiting professors can help with growing the numbers of the MSc programme.
  - The Department should continue the discussions with ETEK on further developing the syllabus to future needs of the
    - market.
  - The Department can consider a minimum entrance requirement for BSc students.

#### **Department's Response:**

We would like to sincerely thank the External Evaluation Committee for their hard work, the constructive discussions held during the virtual visit, and the valuable recommendations that they have provided towards the improvement of our Department and our Programs of Study. We are particularly happy that the EEC has recognized the hard work being done in the Department and the overall positive remarks and grades.



Further, we should state that we have fully adopted the recommendations made by the EEC, and have already undertaken the necessary actions to make the most of these recommendations. These specific actions are provided in more detail within our responses in the prior sections of this response report.

We are looking forward to the positive decision by the Cyprus QAA and are eager to further improve the operations of the Department of Civil Engineering at Frederick University in all dimensions.

### C. Higher Education Institution academic representatives

<i>Name</i>	<i>Position</i>	<i>Signature</i>
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**Prof. George Demosthenous** Rector

Date: 02/07/2021

