Doc. 300.1.2

Higher Education Institution's Response

Date: 20/01/2021

- **Higher Education Institution: University of Cyprus**
- **Town: Nicosia**
- **<u>Programme 1</u>**

  In Greek:

  Μάστερ στην Επιστήμη της Πληροφορικής

  In English:

  Mster in Computer Science (3 Semesters, 90 ECTS, Postgraduate Program)
- **Language(s) of instruction: Greek**
- **Programme's status:** Currently Operating
- **<u>Programme 2</u>**

  In Greek:

  Μάστερ σε Προηγμένες Τεχνολογίες Πληροφορικής (Επαγγελματικό Πρόγραμμα)

  In English:

  Master in Advanced Information Technologies (Professional Programme) (3 Semesters, 90 ECTS, Postgraduate Program)
- **Language(s) of instruction: Greek**
- **Programme'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.300.1.1) must justify whether actions have been taken in improving the quality of the programme of study 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. 300.1.1).*

- *In case of annexes, those should be attached and sent on a separate document.*

1. Study programme and study programme's design and development
(ESG 1.1, 1.2, 1.8, 1.9)

The EEC states that "Based on the three accreditation reports and the remote site visit the EEC can conclude that the Department and the three programs being evaluated have high standards and meet the quality expectations.". For the Master in Computer Science they state that "Students are offered a study programme that is at international standards both for topics, quality of teaching, resources and infrastructures.", and for the Master in Advanced Information Technologies they state that "The program has very good connections with the industry and received feedback regarding industry relevance.". For the two programmes the EEC gives the following areas of improvement and recommendations:

Actions to improve gender and ethnic equality in student enrolment are recommended.

Only 30% of the MSc students graduate in four semesters. This is explained by a high number of part-time students and students working as professionals. The EEC recommends the programs to analyze possible obstacles that the students are facing while doing part-time study.

We see a fragility risk related to the delivery of a such a broad offering with the present size of staff.

The mechanisms for approving of new master's programs appears to involve significant delays across the different steps across the university.

The Department's response:

Due to the pandemic, the Department's efforts to improve gender and ethnic equality in student enrolment with respect to face-to-face activities (school visits, meetings with teachers, etc.) are postponed until the overall situation is back to normality.

With respect to gender equality, the ability of the Department to attract female postgraduate students is directly related to the number of female Cypriots pursuing relevant studies. Therefore, our efforts have been focused on increasing those numbers. A plan is being discussed towards recruiting female students specifically for the postgraduate programs.

For example, back in March 2020 the Department was in contact with the members of its first cohort of graduates (the 1996 graduates), almost entirely composed of females who in their majority are informatics school teachers, with a view to organizing a reunion leading to a think tank for increasing the interest and participation of secondary school female students in informatics. This action is expected to be resumed within 2021.

In addition, the Department is responding positively to all requests from school Heads to establish collaboration links with them. For example, the Head of Latsia Lyceum has requested the assistance of the Department in increasing student interest in informatics and views have been exchanged focusing on gender and ethnic equality. Standard activities of the Department such as the annual Information Day and the Annual Computer Game Development Competition (Logipaignion) are continuing but for the time being these are suitably adapted as a result of the pandemic. The next Information Day will be carried out remotely on the 20th February 2021.

Last but not least the Department has had preliminary discussions and exchanges with the Ministry of Education regarding the possibility of changing the entrance criteria of its undergraduate programme. What is being discussed is to keep as mandatory subjects, the three subjects, Modern Greek (mandatory for all undergraduate curricula), advanced Mathematics and Informatics, while leaving the fourth subject optional from within the various science subjects, economics/finance, or accounting. Such a change is likely to

broaden the pool of students interested in pursuing studies in computer science, of either gender and/or ethnic minorities. The efforts for attracting Ethnic minorities are two-pronged: First, with respect to Language, the new postgraduate programs are poised to help. Second, with respect to Financial Capability, we are relying on the fact that the University is providing Scholarships based on Academic Merit and Financial Needs, which makes it easier for a number of students to pursue postgraduate studies with us (in the Greek program).

The Masters programs are considered Full-time programs, but despite that, given that many students are working, we are scheduling all courses in the afternoon (after 3:00pm). We are following our students' progress through the years and as a Department we have an understanding of the hurdles they face while doing part-time study. The biggest problem is the availability of a sufficient number of graduate-level classes in late evening or night hours. This stems partly from the difficulty in scheduling all the required Lectures, Tutorials, and Laboratory Sessions in the limited hours between 6 and 9pm over weekdays. We are, however, aware of these limitations and our course schedule is changing every semester, so that different options appear on different timeslots within the "normal" four semester stay of a graduate student with us.

A critical short-term objective is the filling of the two new academic positions that have been allocated to the Department and are expected to be released and announced in 2021. Both positions are at the rank of Lecturer/Assistant Professor and can bring important new blood to the Department raising its academic capacity from the current 21 members to 23 members. The specializations for the two new positions have not been decided yet.

Furthermore, according to the new FTE algorithm of the University, the operational adequacy of the Department of Computer Science (given its current teaching obligations) corresponds to 27 full-time academic positions. Thus the Department is 4 academic positions short for attaining its operational adequacy, and as such it expects and hopes that these additional positions will be made available to it in the very near future. Such future positions, will be promptly and fully utilized with a view to creating overlaps with existing competences in such a way as to avoid fragilities in the future

It is true that the University's procedures appear to be slow in approving new programs. However, this is understandable, since new programs need to meet a number of criteria and overcome a number of resource restrictions (faculty, finances, etc.). It is fortunate that the viability of the Department is not directly linked to its ability to introduce new programs.

2. Teaching, learning and student assessment
(ESG 1.3)

Regarding the Master in Computer Science the EEC suggests that "a stronger connection with industry, perhaps through a partnership or an industry board, could offer the students useful insights on industry practices and industry needs making them better prepared for their job seeking at the end of the programme.". For the Master in Advanced Information Technologies, they say that "Stronger links with other universities and industry could offer students a broader range of opportunities."

The Department's response:

All Postgraduate students are expected to take the course "EPL670 Research Methods and Professional Practices in Computer Science". In the context of EPL670 the students are given the opportunity to interact with visiting speakers from industry (for about half of the meetings). This provides them both with insights in industry practices and an understanding of industry needs, in addition to useful contacts.

The Department, either through direct MoUs, or through University-level agreements, has created an Industrial Affiliates program through which it promotes its ties with industry. One of the objectives of the program is to gauge the market trends and to receive systematic feedback. Up to now, the feedback was directed, mainly, for the Department's undergraduate program and a major interaction with those companies is the EPL500 structured internship, again directed to undergraduates (although postgraduates can also participate, but so far have not been actively encouraged, a practice that could change though). We have decided to revisit the program and update its terms of reference. In that scope we will formally establish an Industry Advisory Board.

The establishment of six (6) EU Teaming projects in Cyprus has led to the establishment of an equal number of Research Centers of Excellence. One of those centers is CYENS (formerly RISE) which has in its ranks four (4) members of our faculty. CYENS has a strong Innovation Department which established contacts with the Industry (locally and internationally). Many postgraduate students of the department have an affiliation with CYENS and benefit from its collaboration with the Max-Planck-Institut and University College London, two leading European Institutions.

3. Teaching Staff

(ESG 1.5)

The EEC comments that "The visit demonstrated that there is a good, clear and fair recruiting process in place and that the staff members are excellent researchers and well-prepared lecturers" and states that "the present situation is fragile and expansion in the staff number must be considered. There is a good proportion between junior staff and senior staff at professional positions.". They also state "The number of teaching staff should be increased to better cover some areas and to avoid the looming risk associated with the retirement of some of the senior members of staff.", and that "Teaching and research are well integrated however in most of the cases the topic is covered by only one researcher. This is not ideal from the research point of view because the researcher is operating in isolation, but it is also not ideal from a teaching perspective, because the absence of the researcher (for any reason) will cease the delivery of the topic making the programme vulnerable."

The Department's response:

The Department is well-aware of the issues it faces regarding its staff and thanks the EEC for pointing these out, as it gives its (the Department's) efforts more credibility.

In the short term, the Department expects to fill two new academic positions that have been allocated to the it and are expected to be 'unfrozen' and announced in 2021. Both positions are at the rank of Lecturer/Assistant Professor and will raise the academic capacity from the current 21 members to 23 members. According to the new FTE algorithm of the University, the operational adequacy of the Department of Computer Science (given its current teaching obligations) corresponds to 27 full-time academic positions. Thus the Department is 4 academic positions short for attaining its operational adequacy, and as such it expects and hopes that these additional positions will be made available to it in the very near future. Such future positions will be promptly and fully utilized with a view to creating overlaps with existing competences in a way to avoid fragilities in the future.

The teaching obligations of the Department in the foreseeable future, not only will not decrease, but are expected to increase due to the new, specialized MSc programmes mentioned above. Thus its operational adequacy will continue to be (at least) 27 full-time academic positions. A viable contingency plan should aim to reach the given operational quota within the next 2 years and to maintain throughout the existing quota that currently is 23 academic positions. In this respect a foreseen vacancy due to retirement should be handled promptly meaning that the position should be kept in the Department (adhering to whatever budgetary process the state will have in operation), and announced so that the new recruitment can take up the position as soon as the position is vacated, or at least not more than a semester after.

The Department has noted the recommendations of the EEC regarding the minimum numbers per Thematic Area. The specializations for the two new positions have not been decided yet, but it is very true that in some existing thematic areas, such as computer networks, security, image processing, and others, either there is only one faculty member at present, or there will be one or no faculty member following retirements in the next five years.

As a Department we have had our share of misfortunes (deaths, medical emergencies, forced early retirements on medical grounds, resignations) during the Department's

lifetime and we have always managed to maintain our programmes running with no interruptions. We have faith in our ability to continue to do so in the future.

4. Students

(ESG 1.4, 1.6, 1.7)

EEC recommendations:

Masters students who studied in the undergraduate course in the same university do not have a wide choice of courses to choose from at the Masters level where they encounter substantial new material.

The courses can benefit from a mid-term review questionnaire where students can provide feedback which can be taken into account in the rest of the course.

[In the case of the Master in Computer Science] The choice of projects are initiated by the students in the middle of the second semester when they approach teaching staff for project topics. An alternative approach which will be more student-friendly would be for the teaching staff to collect a list of prospective project topics and descriptions proposed for the MSc students which is published in the middle of the second semester and students can pick three choices in the hope of being allocated one of these.

The Department's response:

The Department's programmes contain 30 graduate courses. Every year, 15 of those courses are offered in the two semesters. In contrast, every year there are between 10-15 advanced undergraduate elective courses offered. Of those only 3 may be considered as having a direct graduate counterpart.

The Postgraduate Studies Committee, having received this complaint has evaluated all courses and verified the numbers and situation presented above. In addition to the facts provided by the numbers, we feel obligated to point out that even in the cases where the topics are the same, the scope is completely different, with different bibliography and reading material, different level and types of exercises, and many times, with a project, in addition to all else. Therefore, we do not share the opinion of Masters students that there are no new courses and no new material provided.

The Postgraduate Studies Committee is in discussion with the Center for Teaching and Learning (the unit administering the course evaluations) in order to devise a suitable mid-term questionnaire.

The Postgraduate Studies Committee accepts the suggestion for a more structured method of Master Thesis topics. The Committee will propose to the Department to employ the same process it uses for the Undergraduate Final Year Project Selection for the selection of Master Thesis topics by the postgraduate students.

5. Resources

(ESG 1.6)

The EEC recommends the following:

The Department should consider a process of addressing any special circumstances that students encounter over the course of a semester or during the examination period, such as illness, mental health issues, bereavement, etc. which can be taken into account when determining their performance in courses.

The Department should consider adjustments schedules for students with disabilities which was not elaborated in evaluation material and during the site visit.

The University should consider support for student housing which seems to be at a premium in Nicosia.

The Department's response:

All students have multiple levels of contact within the Department and the ability to submit requests, suggestions, or complaints. There are the Professors/Instructors, the Academic Advisors (each student has one), the Postgraduate Studies Committee, and the Department Chair/Vice-Chair. The Rules and Regulations for Graduate Studies cover all possible issues.

The Department follows all guidelines set up by the University for people with physical and learning disabilities. For this purpose, there is a direct communication with both the Social Support Office and the Center for Mental Health of the Academic Affairs and Student Welfare Services of the University. Through them we get information on which students need specialized support at the Department level. Most, if not all, of the requests and recommendations are acted upon by the Department and the Instructors. In addition, one of the faculty members (who happens also to be a member of the Postgraduate Studies Committee) is designated as the Faculty Member Responsible for Students with Disabilities.

The third item is out of the scope of our responsibilities. We will pass on the suggestion to the University Housing Office.

6. Additional for distance learning programmes
(ALL ESG)

Click or tap here to enter text.

7. Additional for doctoral programmes
(ALL ESG)

Click or tap here to enter text.

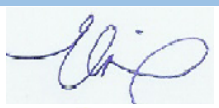
8. Additional for joint programmes
(ALL ESG)

Click or tap here to enter text.

B. Conclusions and final remarks

The Department of Computer Science and the Postgraduate Programs Committee expresses its sincere thanks to the EEC for the in depth evaluation of its postgraduate programmes, and the interesting discussions and insightful exchanges that took place during the two-day online meetings with staff and students.
The Department fully agrees with the recommendations of the EEC and has already started implementing those recommendations that are within its sphere of responsibilities.
The Department also expresses its sincere thanks to the CYQAA and the officer supporting the whole evaluation process for their professionalism and for ensuring the smooth running of the evaluation process from start to finish.

C. Higher Education Institution academic representatives

Name	*Position*	*Signature*
Elpida Keravnou-Papailiou	Chair of Department of Computer Science	
Vassos Vassiliou	Coordinator of Graduate Studies Committee	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	
Click to enter Name	Click to enter Position	

Date: 20/01/2021