External Evaluation Report (Programmatic, Doc. 300.30.1/1)

Programme 1 – BScEE

Programme 2 – MScEE

Programme 3 – PhDEECEI

The present report is provided in order to answer the comments raised by the committee on the section, Areas of improvement and recommendations for the BScEE, MScEE and PhDEECEI programs and these are given below as follows. The comments of the committee are provided in italics, while our answers are given in normal font style:

1. Study programme and study programme's design and development

For BScEE

One potential improvement is to have more bi-directional communications between the students and the department, which is particularly important to quality assurance. Currently, the department has some mechanisms for students to feed their opinions back to the department, but the department may also want to introduce some mechanisms to allow students to be aware the changes made by the department. For such a purpose, regular staff-student meetings during the semesters can be quite useful.

Answer: Bi-directional communication between the students and the department is indeed a high priority and very important for the study programme's design and development. In addition to the department's existing mechanisms that allow students to feed their opinions back to the department, the department will improve this dynamic procedure (with all performed changes) to the students. One way is to explicitly address such issues in the council meetings, where students' representatives are present, whereby encouraging students to both give their feedback as well as to communicate any new decisions to their fellow students. This can also be done by informing the students through email sent by the department's secretariat.

For MScEE

1. The above suggestion for having more bi-directional communications between the students and the department is also applicable to this MSc programme.

Answer: As stated above for the BScEE programme, bi-directional communication between the students and the department is indeed a high priority and very important for the study programme's design and development. In addition to the department's existing mechanisms that allow students to feed their opinions back to the department, the department could try and improve this dynamic procedure (with all performed changes) to the students. One way is to explicitly address such issues in the council meetings, where students' representatives are present, whereby encouraging students to both give their feedback as well as to communicate any new decisions to their fellow students. This can also be done by informing the students through email sent by the department's secretariat.

2. Furthermore, the evaluated MSc programme is currently suffering the difficulty for having a small number of students. The department has informed the panel that they have been building international teaching partnerships, which will certainly be helpful for the recruitment issue. The department may want to provide more proactive recruitment activities.

Answer: We acknowledge the fact that the small number of enrolled students is currently our greatest concern. As suggested by the Committee, a more proactive recruitment policy including international teaching partnerships is currently under way, which is further detailed below.

For PhDEECEI

While the number of publications from PhD students is good, the department should encourage publications of higher quality and impact from the PhD students. In particular, it might be useful to prioritize the journals and conferences for dissemination, which is a cost-effective solution given the expensive publication costs and also useful to improve the research reputation of the department.

Answer: We thank all the Committee members for the thorough and comprehensive report provided to us and for all the efforts taken to perform this evaluation.

The department strives for high quality and publications with impact (as illustrated for instance by publications in Nature journals) and certainly welcomes this comment from the Committee. The strategy to further encourage such publications from the PhD students will be the following:

- Discuss this point with all Research Advisors during the first departmental meeting on each academic year, so that they convey and emphasize it to their current PhD students and prioritize with them potential publication venues for each academic year, as suggested by the Committee.
- Showcase at the end of each academic year research results of PhD students published in high-impact venues during presentation events.
- Prioritize potential departmental scholarships and/or financial support towards PhD students with publications in high impact venues so as to provide further incentives to this end.

2. Student – centred learning, teaching and assessment (ESG 1.3)

For BScEE

Not many areas of improvement were detected for this program.
Consider getting student feedback during the term/semester to benefit the students and courses in the ongoing term/semester.

Answer: As mentioned above, one way is to explicitly address such issues in the monthly departmental staff meetings, where students' representatives are present. Additionally, the teaching staff, based on the contents of the University's structured questionnaires for the course assessment, could discuss with their students such issues in the middle of the semester.

Additionally, the academic advisors assigned to each student could trigger more discussions toward that direction.

Also, the Department could encourage the appropriate office of the University to modify the survey system to allow the students to provide more feedback by allowing them to write their own comments and suggestions. Additionally, the department already has academic advisors assigned to each student. Furthermore, frequently faculty ask students in the last lecture of the semester to suggest improvements for the course.

For MScEE

1. Not many areas of improvement were detected for this program.

Answer: We thank the Committee for this comment.

2. Consider fostering industrial internship opportunities available to MSc students.

Answer: We will consider fostering industrial internship opportunities available to MSc students. More specifically, the Department will seek to advertise itself better though actions like presentations in the public sector and the industry for promoting collaboration opportunities.

3. Consider getting student feedback during the term/semester to benefit the students and courses in the ongoing term/semester.

Answer: As mentioned above, one way is to explicitly address such issues in the council meetings, where students' representatives are present. Additionally, the teaching staff, based on the contents of the University's structured questionnaires for the course assessment, could discuss with their students such issues in the middle of the semester. Additionally, the academic advisors assigned to each student could trigger more discussions toward that direction. Also, the Department could encourage the appropriate office of the University to modify the survey system to allow the students to provide more feedback by allowing them to write their own comments and suggestions. Additionally, the department already has academic advisors assigned to each student.

4. Consider a proactive strategy for increasing the number of MSc students.

Answer: A more proactive recruitment policy including international teaching partnerships is currently under way, which is further detailed below. The Department believes that this situation will improve gradually as only recently the university hired personnel specifically for this purpose that is to improve its marketing strategy and improve its profile in community.

For PhDEECEI

Not many areas of improvement were detected for this program.

Answer: We thank the Committee.

3. Teaching staff (ESG 1.5)

For BScEE, MScEE, PhDEECEI

1. The permanent staff number has to gradually increase with new appointments that will strengthen various subjects already offered and also expand to new subjects. Currently the Department is considered understaffed. In addition, provision for distinguished visiting professors will also be an excellent practice, for teaching topics at the MSc and PhD level.

Answer: We totally agree with the Committee. New positions for permanent staff are allocated to the department by the university and are independent of the number of positions that the department actually requests on a yearly basis. The current plan is based on the positions allocated by the university and equates to two new faculty positions per year at the rank of Lecturer or Assistant Professor. The department follows exactly the Committee's recommendation in this aspect. Particularly, it seeks to hire either new faculty that will strengthen existing subjects in strategic areas identified by the department (e.g., recent faculty hiring in Biomedical Engineering to strengthen this area) or expand to new important

subjects not covered by the existing permanent staff (e.g., a Lecturer/Assistant Professor position in Computer Security is currently at the interview stage).

We also totally agree with the Committee that provision for distinguished visiting professors will be an excellent practice for teaching topics at the MSc and PhD level. The department has limited budget for this purpose and has in the past utilized it bringing distinguished professors from abroad for teaching purposes. Unfortunately, provision for longer term visiting professorships currently does not exist at the university), although it is the department's understanding that this point is currently being studied by the university. Once provisions are in place the department will be able to employ interested distinguished visiting professors on a longer-term basis.

2. The Department can develop a more comprehensive way to provide feedback to the teaching staff, based on the assessments recorded in the student Questionnaires by the end of each semester. It can be a Performance Review formally conducted once a year, with specific observations, suggestions, and measures to be taken.

Answer: The "Departmental Studies Committee" in collaboration with the Department Chair, who has all data available in relation to the Questionnaire, could analyse the collective results at the end of the academic year and prepare a "Performance Review" with specific observations, suggestions, and any necessary measures to be taken.

3. It will be a good practice for the academic staff to regularly organize seminars intended for MSc and PhD students, by inviting distinguished speakers both from universities, research institutions and industry. This gives the MSc and PhD students the opportunity to broaden their knowledge in cutting edge fields from leading scientists. In addition, regular workshops can help MSc and PhD students develop their presentation skills, expose their work to a broader audience and promote their work. Activities as above also strengthen the ties between the Department and other institutions or the industry and advertise the work and research results achieved.

Answer: This is an excellent suggestion that the department already wanted to implement. Following the Committee's recommendation, we will:

- Organize events where PhD and MSc students can present and discuss their work and receive feedback both with respect to their work and presentation skills from faculty of the department.
- Strive to regularly organize seminars intended for MSc and PhD students, by inviting interested distinguished speakers both from universities, research institutions and industry. We note that such presentations are already occasionally taking place in our department as well as in some classes of our MSc programs in order to create awareness to the students about industrial opportunities and related research problems.
- Reserve a common space (e.g., the department's conference room) for the students to interact so that they can informally discuss their research, which can offer opportunities for interdisciplinary research activities and further improve innovation.

4. Newly appointed members of staff should be supported at their early stage; this includes light to moderate teaching load for the first two years, an amount of money for equipment purchase and space for developing their research activities. A departmental committee exclusively for younger academics can be set, accelerating their development through mentoring, feedback, and guidance.

Answer: In order to support the newly appointed members of staff, a departmental committee, "Staff development Committee", consisting of the Chair and 2 senior members of staff, could set. Its role will be to act in terms of mentoring, asking feedback, and providing guidance to the new members of staff.

It must also be stressed that, in addition to the start-up grant provided by the University, the Department has always given priority to newly appointed members of staff in terms of budget for laboratory or computer equipment. Moreover, the Department, whenever possible in the framework of the University's regulations, tries to assign the newly appointed member of staff with a one's course load during their first semester at the University. We also note that the university as of this year established a call for small grants (5000 Euros) dedicated for lecturers and assistant professors.

4. Student admission, progression, recognition and certification (ESG 1.4)

For BScEEI

1. During the interview with the students, it has been stated that they would like to have more practical courses like laboratories. The Department should discuss this with students.

Answer: From a total number of 43 courses, the programme of study already includes 4 full laboratory autonomous courses, while 10 other courses are supported by laboratories, and 2 courses are for the final year project that includes laboratory or practical work.

However, the Department will set a meeting with the students' representatives in the Department Council to discuss further issues related to practical courses.

2. The number of students entering the programme is decreasing every year. The Committee suggest that the Department should try to discuss the reason for this major challenge with all stakeholders. More should be done in trying to attract more students.

Answer: It is true that it is a challenge to attract more students. To this end, the following have been done and will be done:

- The Department believes that this situation will improve gradually as only recently the university hired personnel specifically for this purpose that is to improve its marketing strategy and improve its profile in community.
- The University along with other social institutions has taken measures that are in progress, so as to reduce cost of living in Limassol, which is also an obstacle in attracting more students (and consequently top-students as well). Soon enough a better level of student housing, with cheaper rents, will be achieved and is expected to help the whole university (and the EECEI department) toward this direction.
- The Department will seek to advertise itself better though actions like presentations in high-schools.
- The Department will seek cooperation with other departments of school of engineering so as to organize a campaign about attracting better students through certain measures that will be decided.
- The University, along with 7 other European universities, have recently formed the European University of Technology (EUt+) (https://www.univ-tech.eu/). As part of this new entity, courses are gradually transferred to English-teaching and will be made available for EUt+ students. As a

result, the visibility of the department's BSc programme will increase and attendance will be bolstered through the student exchange program.

- Recently we have signed an agreement with the Ministry of Defence so that engineers from the army join our B.Sc. program in order to receive a second degree in Electrical engineering.

For MScEE

1. The evaluation committee thinks that an area of improvement of the Master is concerned with the number of enrolled students. The evaluation committee suggests that the Department tries to attract local students while being more active in advertising the outcomes and benefits of Master programme. Another suggestion is to visit public sector and industries in Cyprus promoting further education to employees. Furthermore, teaching the programme in English can attract foreign students from abroad.

Answer: We acknowledge the fact that the small number of enrolled students is currently our greatest concern. As suggested by the Committee, a more proactive recruitment policy is currently under way, which is further detailed below:

- The Department believes that this situation will improve gradually as only recently the university hired personnel specifically for this purpose that is to improve its marketing strategy and improve its profile in community.
- The University along with other social institutions has taken measures that are in progress, so as to reduce cost of living in Limassol, which is also an obstacle in attracting more students (and consequently top-students as well). Soon enough a better level of student housing, with cheaper rents, will be achieved and is expected to help the whole university (and the EECEI department) toward this direction.
- The Department will seek to advertise itself better though actions like presentations in the public sector and the industry for promoting further education to their employees.
- The Department will seek cooperation with other departments of school of engineering so as to organize a campaign about attracting better students through certain measures that will be decided.
- The University, along with 7 other European universities, have recently formed the European University of Technology (EUt+) (https://www.univ-tech.eu/). As part of this new entity, courses are gradually transferred to English-teaching and will be made available for EUt+ students. As a result, the visibility of the department's MScEE programme will increase and attendance will be bolstered through the student exchange program.

2. Another area of improvement is concerned with the percentage of students who withdrew, and the urgent need for a structured process to monitor and improve this. Another suggestion is to have a mixed programme with physical and remote participation in an effort to keep in the Master programme the students that withdraw.

Answer: We thank the Committee for pointing this out. A more structured process will be implemented to monitor the student performance and provide the necessary guidance and support when needed. Specifically, we will consider getting student feedback during the term/semester to benefit the students and courses in the ongoing term/semester. Additionally, the academic advisors assigned to each student could trigger more discussions toward that direction.

We will also consider the suggestion of the Committee for providing more flexibility through remote participation possibilities. Note that most modules are already taught with a mixed participation model (both physical and remote) due to the COVID restrictions.

For PhDEECEI

The evaluation committee thinks that an area of improvement is the low number of PhD candidates. The evaluation committee suggests that the Department tries to attract local students while being more active in advertising the outcomes and benefits of PhD programme. Another suggestion is to visit public sector and industries in Cyprus promoting prospects of PhD.

Answer: The department will strive to advertise the outcomes, benefits and career success stories of its PhD program and its doctoral graduates, more aggressively in:

- University open days.
- Social media (Facebook, Twitter, LinkedIn, etc.).
- Departmental and/or Research Advisors' web sites.

The department will also more aggressively advertise potential funding opportunities for the PhD students via the above channels and visit relevant public sector and industries in Cyprus promoting prospects of PhD whenever appropriate.

We also note that the interest we receive from overseas students for our PhD programme is high, but unfortunately applications from beyond the EU have complicated visa requirements. Assuming that the university will create an appropriate office to assist with visas for postgraduate students in the near future, we expect the number of overseas PhD candidates to significantly increase.

5. Learning resources and student support (ESG 1.6)

For BScEE, MScEE, PhDEECEI

1. It is highly recommended to ensure the continuous funding of the infrastructure that supports the programme. This includes lab infrastructure and relevant to the programme software. It seems that the University does not have sufficient financial resources to guarantee this.
&
3. The allocated resources for funding the infrastructure and for the operation of the department and the continuous improvement of the quality of its programmes of study need to be re-evaluated.

Answer: There is a relatively sufficient yearly allocated budget for the laboratory infrastructure and computer software or other equipment. However, making careful, targeted and timely choices for buying new such material, as well as using research infrastructure, has allowed all the Department's programmes of studies to maintain their high quality.

Of course, the ideal situation would be for the University to increase its financial resources and offer a sounder guarantee for maintaining a high-quality infrastructure.

Another possible means to increase the funding for infrastructure is to allocate more funds from the post-graduate tuition income. Finally, in some cases equipment was donated from frequent suppliers. We will attempt to push suppliers for donating infrastructure in the department.

2. It is important to improve teaching with external visiting staff to enrich teaching and connect it with the industry.

Answer: With the current financial restrictions there is very limited budget available for short term visiting professorships. However, it is the intention of the Department to bring the issue for discussion in the higher ranked bodies of the University, so that the University allows openings for longer term visiting professorship positions.

In the meantime, guest lectures from scholars of international reputation visiting Cyprus are periodically taking place, as well as collaborations with industrial experts who act as advisors or examiners of students' projects. Such actions could indeed further be promoted. Occasionally, speakers are invited from industry to make presentation in during classes.

6. Additional for doctoral programmes (ALL ESG)

For PhDEECEI

The programme could support more international and external periods of research to broaden the scope and context of the students' research studies. Probably, an increase in external collaboration with professors from other universities both from Cyprus as well as from abroad, will increase the visibility of the programme, also by involving private companies in the field of Electrical Engineering. This might very likely lead to joint publications.

Answer: We totally agree. The program currently supports such exchanges mainly through European research grants. Such projects usually consist of a large consortium of European partners from both academia and industry and themselves require that researchers/PhD students spend an amount of time in partner institutions/organizations in terms of secondments. The faculty of the department also maintains very fruitful and long-lasting research collaborations with researchers located in top institutions around the world, as indicated by joint research publications in top venues. The department will intensify its efforts in this direction via:

- Targeting research proposals in national and European research schemes that can financially support the exchange of PhD students among national and international research partners (universities, research centres, private companies in the field of EE/CEI, etc.)
- Striving to maintain long-lasting collaborations between its faculty members and external institutions from both Cyprus and abroad by encouraging sabbatical leaves of its faculty members to such institutions.
- Regularly inviting existing research collaborators, or new potential collaborators, for exchanging ideas and brainstorming on new projects, using available funds for research networking purposes.
- Currently our Ph.D. students can take advantage of actions offered by ERASMUS and COST actions. Our intention is to increase the mobility though these actions.
- The University, along with 7 other European universities, have recently formed the European University of Technology (EUt+) (https://www.univ-tech.eu/). As part of this new entity, research exchanges will be made available for EUt+ Ph.D. students.

D. Conclusions and final remarks

The members of the EEC committee found the academic programmes in BSc in Electrical Engineering, MSc in Electrical Engineering, and PhD in Electrical Engineering, Computer Engineering and Informatics to be compliant in all examined aspects. The existing course offerings provide a balance between engineering fundamentals and practice. Moreover, active learning is encouraged through lab work and other means presented by the faculty.

Answer: We thank the committee for the very positive comments.