

Doc. 300.1.2

# Higher Education Institution's Response

Date: 2/10/2021

- **Higher Education Institution:**  
Cyprus University of Technology
- **Town:** Limassol
- **Programme of study  
Name (Duration, ECTS, Cycle)**

**In Greek:**

Πτυχίο Μηχανικών Ηλεκτρονικών Υπολογιστών και  
Πληροφορικής

**In English:**

Bachelor's Degree in Computer Engineering and  
Informatics (4 academic years, 248 ECTS, BSc)

- **Language(s) of instruction:** Greek
- **Programme's status:** Currently Operating
- **Concentrations (if any):**

**In Greek:** Concentrations

**In English:** Concentrations

**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 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4) 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 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 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4).*
- *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, 1.7, 1.8, 1.9)*

### Findings

The content and the learning outcomes of the Computer Engineering and Informatics (CEI) program of the Cyprus University of Technology are in line with the current standards and expectations in the sector. The Programme complies with appropriate quality assurance policies in place at the University. The program structure and course distribution in semesters are clearly and properly identified with a coherent list of compulsory and elective courses.

The CEI program had 110 students in 2020, and they were supported by 8 Faculty members (5 permanent and 3 transferred staff). The academic staff teaching the courses have the appropriate qualification, consistently with the program. Almost all faculty members hold a doctoral degree in a relevant subject. Their teaching load is consistent with the sector. The courses are taught mostly by permanent staff and only a few non-permanent staff supporting the program.

The CEI program was developed to meet the expectations of the local employment conditions in Cyprus. The program has excellent employability statistics with 100% of the most recent graduates being in employment, above the overall statistics of the Institution, for which indicatively 89% of 2018 graduates have been employed.

The department has been very successful in attracting external research funding and demonstrated strong links to the local market and industry.

The dropout rate for students in the program is 6%, which is quite low compared to other departments.

### Strengths

Overall, the CEI program meets the quality conditions and expectations for a Higher Education Institution in Cyprus and at the European level.

The small class size of this program allows personal interactions between faculty and students, and efficient monitoring of student progress by faculty members. The positive results of this might be reflected in the relatively low dropout rate of students in this program, and the high employment rate of graduates.

The program is well designed and covers most areas of computer science, from fundamental areas to many specialisation fields and, in particular, there is a clear synergy with the EE component of the department. This is very positive and offers the opportunity to develop specialised fields, such as Cybersecurity, IoT, CPS, embedded system, even further to become a unique selling point (USP).

### Areas of improvement and recommendations (suggestions have been numbered for easy reference)

1. Currently there is no specific review process of the program, and a strategic plan of development is not clear or publicly available. Some aspects of the program may benefit from a revision and a more focused strategic plan to build upon some strong USPs, such as synergy with EE and industry, and the involvement of UG students in research activities.
2. The role of the compulsory courses on biology and on physics needs to be more strategic in the context of the program. Alternatively, these can be replaced with more specialised CS/EE modules, such as AI/ML, Data Science, Cybersecurity, and IoT, also in consideration of the current expectations of employers.

3. A module dedicated to the programming language Python should be introduced. This is an important language that students need for several activities during their studies and for their employability after they graduate.
4. Communicate in a systematic manner relevant statistics (e.g., number of applicants, student drop-out rate, examination pass rates, etc.) to all related faculty and staff in order to facilitate ongoing monitoring and improvement of the CEI program.
5. Enhance the quality assurance practices by engaging and receiving feedback from international or local industry experts in the related fields, in order to assure that the program is enriched with hot topics in the field. This will also contribute to the attractiveness of the program.

### Responses to suggestions for improvement and recommendations

1. Although the department reviews the program of study periodically, this suggestion will be followed in the future and the review process will be applied more formally: The Undergraduate Studies committee of the department will review the program every three to four (3-4) years in terms of new scientific trends and topics, as well as of comparison to other similar curricula, and with the official involvement of the local industry/market and student representatives. Undergraduate (UG) students are already being involved in research activities, as in various courses invited lectures are delivered by faculty of other universities with which the department is collaborating in the context of EU projects (e.g. DESTINI, DOSSIER-Cloud, ENCASE, etc.), or through projects and final year theses (e.g. on Digital Twins for healthcare, or Machine Learning Operations – ML-Ops). Therefore, we believe that this is already covered, while the department will continue involving UG students to research activities in the future.
2. This suggestion is directly related to the revision of the program described in point (1). Indeed, the two courses mentioned will be re-examined as to their purpose and usefulness, with the Undergraduate Studies committee examining more specialised CS/CE modules, such as the ones mentioned. It should also be noted that selected AI/ML topics are already offered through course CEI 329 - Statistical Pattern Recognition and Machine Learning, while Cybersecurity is one of the new scientific areas that the strategy of the department identified as a key area to invest in, and has already opened a new faculty position which will be filled the near future (next 6 months). As for the rest of the suggested courses, we agree that these could be offered as electives.
3. The department strategically focuses more on teaching its students programming principles and methods using some programming languages as tools rather than teaching specific programming languages per se. In this context, we do so either using the structured programming paradigm (e.g. using C), or the object-oriented one (using C++ and Java). We agree that the suggested language is nowadays one of the most important and popular ones, and we usually expose students to this language through projects in various courses that may greatly benefitted by Python, such as CEI 329 - Statistical Pattern Recognition and Machine Learning. Nevertheless, currently the department feels that it is not amongst its highest priorities to offer an independent course on Python, without, of course, rejecting the idea of utilizing Python in new courses, such as Data Mining or Data Science, once such courses are offered in the future.
4. The suggestion to produce statistics systematically (e.g., number of applicants, student drop-out rate, examination pass rates, etc.) and communicate these figures to all related faculty and staff will be discussed with the Student Affairs Services at CUT so that this is performed by the respective officers at the end of each semester or year (where applicable), and the results are sent to us for further processing. We should also note here that examination pass rates are also calculated individually by the faculty (each instructor for her/his own courses) and a statistical analysis is usually available at the level of grades achieved for each course. In cases in which grades are systematically dropping for consecutive years the instructor informs the Chair and the Coordinator of the degree, and sometimes this is also discussed in council meetings to find the possible causes and take appropriate measures (e.g., lack of

specific background is tackled with an introduction to the relevant topic before proceeding to advanced notions).

5. This point is also directly linked to point (1) analyzed above. The periodic revision process will be performed with the utilization of market and industry experts, mostly local, but also, where possible, international (e.g., through collaborations in EU funded projects), so that the program is enriched with hot topics and new trends in our field. Our intention is to treat our program as a “living thing” that will evolve and mature as time goes by, without, of course, losing its main identity as a Computer Engineering and Informatics program of study.

## 2. Student – centred learning, teaching and assessment

(ESG 1.3)

### Findings

The student-centred learning, teaching and assessment is focused on developing to the highest level the ability of students for an independent and inventive approach to modeling, design and implementation of systems (software and hardware), models and algorithms from a wide range of applications in various sectors of economics, society and market.

### Strengths

The program combines strong theoretical scientific knowledge with excellent training in computer system design, analysis and evaluation. Graduates of the program are registered as members of the Cyprus Scientific Technical Chamber (ETEK) enjoying all professional rights of an Engineer. Assessment is consistent, appropriate, transparent, objective and supports the development of the learner.

### Areas of improvement and recommendations (suggestions have been numbered for easy reference)

1. EDI (Equality, Diversity, Inclusion) Committee to provide support for the students and staff.
2. Formal advisory board for the curriculum review every 3-4 years in order to provide feedback and inclusion of industry representatives should be mandatory.
3. Rigorous internal reporting in terms of the pipeline year on year of students graduating showing the progression from undergraduate course to postgraduate courses. This reporting should include the students progression to industry and academia after the graduation.

### Responses to suggestions for improvement and recommendations

1. A dedicated Senate committee to handle all matters related to Equality, Diversity and Inclusion has been established at central level within CUT (namely the Committee for Equality), while there are officers that belong to the Student Affairs Services with this line of duties. In addition, CUT currently participates in a related EU funded project called Gender-SMART (Gender in Science Management of Agriculture & life sciences, including Research and Teaching) which is about achieving gender equality in Research Performing and Research Funding Organizations operating in the agricultural and life sciences research field. Finally, it should be noted that CUT has recently produced its Gender Equality Plan. The department will collaborate with these committees/persons/initiatives, and will seek guidance on such matters so to be able to provide support for the students and staff. Due to lack of personnel and heavy administrative workload, the department has decided that instead of having a separate committee, the Undergraduate Studies committee will undertake this task, the duties and responsibilities of which will be expanded to include EDI.
2. This is covered in the previous section: The Undergraduate Studies committee will review the program every three to four (3-4) years in terms of new scientific trends, as well as of comparison to other similar curricula, and with the official involvement of the local industry/market and student representatives. The periodic revision process will be performed with the utilization of market and industry experts, both local and international, where possible, with the aim being to enrich the program with hot topics and new trends in the relevant field.

3. This suggestion is not easy, but quite challenging instead. The department has devoted time and effort to establish and maintain communication channels with its graduated students, mainly through social network and dedicated lists, as well as the official alumni services of the university. We have been keeping records mainly of students that excel both in academia and in industry, locally and/or internationally. We will intensify these efforts and also establish a monitoring process (e.g., through a dedicated portal) for our graduates, which will enable us to record more formal information about the course of their career evolution.



### 3. Teaching staff

(ESG 1.5)

#### Findings

The EEC considered the submitted documentation and met with staff to understand the clarity and fairness of the approach on how the university recruits, appoints, inducts and supports academic staff in delivering high quality teaching, research and student experience. Based on these, the recruitment and selection procedure seems to be fair and clear. There are clear criteria for different teaching ranks (professor, associate professor etc) and clear guidelines for progression and promotion.

There are some central procedures to support staff induction and staff development. However, these are not systematically structured and there is no training activity menu. Another shortcoming is that new academic staff are not always assigned a mentor. On the positive side, the EEC has found that the university is supporting its staff undertake research and publish their research findings. Support is in both financial and time allowance terms. The minimum teaching load is 6 hours of teaching per week. Staff is expected to teach approximately 25-30% of their time. A startup package of approximately 40000 Euros in research funding (for 2 years) and approximately 15000 Euros for equipment is offered to newly hired staff. Sabbaticals of approximately 6 months are offered to staff every 3 years. The research output of the staff involved in this program, over the last 7 years, includes: 170+ journal publications, 22+ conference publications, 15500+ citations, 5 patents, 36 book chapters, 45+ externally funded research projects (8.4 million Euros brought in during the last 5 years alone). Part of this research output is disseminated through internationally elite publications, such as Nature. Collectively, the above figures are impressive.

The link between teaching and research is healthy. At least 2 undergraduate students of the program have been co-authors in scientific publications. Other graduates of the programme are pursuing a PhD in this area.

There are currently 5 permanent academic staff involved in the program delivery (all of them are men). Out of the 5, 1 is a full professor, 1 is associate, 3 are assistant professors. There was one more professor, who recently passed away, and this position is expected to be filled in the near future, raising the total professorial number to 6. There are also two permanent senior lecturers and 1 permanent lecturer involved in the programme, as well as a 3 teaching staff and a number of non-permanent scientific staff. Almost all faculty staff have a PhD. There is a small number of staff who do not have a PhD (they are transferred to the university from higher educational institutes which did not require a PhD at the time when they were hired. This practice has now ceased).

The CVs of existing staff demonstrate very good evidence of appointed academic staff having prior and relevant teaching and research experience in other higher education institutions. Research expertise and publication records are relevant and consistent to the program of study.

There is a student survey which gathers student feedback which is being used for staff evaluation purposes but not used as part of the annual program of study review and self-assessment. There are no teaching and observation peer review procedures.

As a whole, the teaching staff is highly commended by the students for the particularly friendly and supportive environment. However, students have pointed out the lack of female academic staff as a weakness.

#### Strengths

The staffing base and the low number of students have contributed to an excellent Student-Staff Ratio (SSR) that is less than 10. Staff expertise is consistent with the program of study and it seems that they receive appropriate support to undertake research. This is evident by the strong research output of the staff involved in this program.

### Areas of improvement and recommendations (suggestions have been numbered for easy reference)

1. The EEC has identified lack of training support and therefore, it requires the development of systematic central support menu with regards to new staff induction, and mentoring and development support for existing staff members. This aspect of teaching staff development is required to fully meet the criteria.
2. The EEC has also realised that there are no procedures for staff peer review and therefore it recommends for the development and implementation of a relevant procedure. In particular, a minimum of didactic & pedagogical training should be compulsory to all staff.
3. The EEC recommends that student aggregated feedback following the course evaluation survey should be used in the program review procedures. Finally, the EEC recommends that targeted efforts are made to recruit female academic staff of high scientific calibre.
4. An area of concern is the relative number of permanent academics versus non-permanent teaching staff. The EEC recommends further appointments of permanent academic staff to strengthen the academic cohort and allow the development of the program in strategic areas.

### Responses to suggestions for improvement and recommendations

1. When new staff is recruited, the department takes all appropriate actions to help and support the new faculty members to undertake their new duties and be able to become productive as soon as possible (i.e., office space, equipment, teaching rooms/lab orientation, teaching obligations and policies, admin duties, etc.). Although this is not a formal procedure documented in the internal rules and policies of the department, it has served new staff quite well so far. Nevertheless, following the suggestion of the evaluation committee, the department will produce a formal procedure for supporting and mentoring new faculty members. This process will also support the development of existing staff members, which, currently, is performed also unofficially through bilateral communication between colleagues, with seniors advising juniors. The department, and to the best of our knowledge CUT as a whole, promotes and supports academic freedom and independence of research amongst its members. As a result, only general-purpose guidelines can be put in place in terms of career development, quality of research and teaching, setting of goals, etc. Each faculty member is free to develop her/his teaching and research pillars as see fit. In this context, the department will try to develop the abovementioned formal process respecting at the same time academic freedom. Furthermore, CUT has recently established its Learning Development Network. The main objective of the Network is to enhance the educational experience of the students of the Cyprus University of Technology and to promote innovation in teaching and learning. The Network aims at designing and implementing a series of seminars and workshops based on innovative teaching practices, promoting the exchange of good teaching practices and the contribution to the design of a long-term educational policy of the University, continuously supporting academic practice, as well as coordinating and operating new, creative learning spaces at the University. The Network is composed of three Support Groups: the Academic Group, the Student Learning Support Group and the Educational Technology Group. The department will follow the guidelines of the Network so as to support both the academic staff provide and its students enjoy qualitative learning respectively.
2. Indeed, there are no formal procedures for staff peer review. This review usually takes place during the promotion of faculty members (after 3 or 4 years depending on the rank). The development and implementation of a relevant procedure is not an easy task as it has to conform to all relevant legislation (university law, work law) of Cyprus. So far, such procedure is not included in the current legislation and as a department we cannot develop one and enforce it; it has to go through all other internal (i.e. at the university level) and governmental bodies (ministry of Education, the Parliament etc.). As a department we will report it to the corresponding senate committee of CUT. As regards the suggestion for a minimum of didactic & pedagogical training that should be compulsory to all staff, again this may violate the terms of employment for academic personnel as it adds to their workload. In addition, there is no

formal body within CUT that is able to offer this sort of training, which, additionally, creates a new financial burden that must be included in the university's budget. This creates more obstacles to the development and operation of this training mechanism. Nevertheless, the department will report this suggestion to the appropriate CUT senate committees for further handling.

3. The evaluation of courses by students is currently performed through a specialized questionnaire, the latter having a rather generic structure that does not allow for recording details. It involves a number of questions on various teaching and evaluation aspects which are scored on a Likert scale anonymously. This type of evaluation suffers from the following: (i) It does not provide enough feedback in cases in which the score is low, (ii) Anonymity often acts against objectivity, with students that did not do well in class, or the intermediate course evaluation methods, or find the course tough, declaring their frustration or negative thoughts through low scoring. Therefore, these scores should be taken very cautiously into consideration, especially for the instructor of the course and his teaching, or the significance and value of a course when reviewing the program. Nevertheless, following the suggestion made by the evaluation committee here, the department will try to include the evaluations in future program revisions. To the best of our knowledge, two senate committees (Studies and Quality) are currently investigating how to revise and enhance the evaluation questionnaire, as well as the process to assess findings. The department will follow closely this revision and of course apply the new procedures that will be approved by the Senate. Finally, the department agrees that more efforts should be made to recruit female academic staff of high scientific calibre. The problem here is that according to the current legislation, the advertisement of a new position should provide equal opportunities for both male and female candidates. Therefore, we cannot target colleagues of a certain gender as this would constitute discrimination. We usually try to draw the attention of female candidates to new positions through personal communication of members of the department with colleagues within our networks of collaborators.
4. We fully agree with this comment. The department believes that it is understaffed and that more permanent positions should be granted. Nevertheless, since CUT is a public university supported by state funding, it cannot decide autonomously and independently for new positions. Instead, it makes an internal analysis of its needs in terms of new permanent academic staff (also including Lecturers and Assistant Professors) and reports this to the government. It is then up to the government to decide how many new positions will be given to all state universities. This suggestion, though, will be communicated to the government in the next report to leverage the acquisition of new positions. As a final note, we would like to inform the committee that there is currently one open position for the Computer Engineering and Informatics degree (at the rank of Lecturer or Assistant Professor), which focuses on Security (the announcement is provided in the Appendix at the end of this report).

## 4. Student admission, progression, recognition and certification

(ESG 1.4)

### Findings

Appropriate admission requirements are in place and clearly communicated. The minimum admission requirement is a grade point average of 17.2/20 in the general school leaving exams in the Cypriot state educational system, or equivalent for international admissions. There are very few Erasmus students, about 1-2 per year.

There are appropriate plans to support student progression and attainment. Academic advisors and tutors are available to support and monitor student progression. The grading and degree classification systems are comparable to other national and international Higher Education Institutions.

The EEC has observed that student progression from year to year in the degree program is appropriately monitored and supported by exams and other means of assessment so that students can move forward in their studies. Specifically, students' progress given the learning outcomes is continuously monitored with exams, tests, projects, practical assignments. Students receive constructive feedback on their progress in both courses and practical project work. Flexibility is demonstrated: for instance, students have a period of 2 weeks to swap to another elective course, if they wish. Safety mechanisms are also in place to ensure student learning: for instance, classes with a failure rate above 50% have to be re-offered in the summer period. Another example is that students who are struggling are offered extra tutoring during the course, so that they do not fail it.

There are very few female students. The gender gap is a general and important issue to be addressed. A strategy should be designed and implemented to address this.

The Department monitors that student performance and wellbeing and supportive services are in place. A drop out rate of 6% was reported and an employment rate of 100% of the most recent graduates. Both of these rates are very satisfactory.

There are appropriate plans to support student progression and attainment. Academic advisors and tutors are available to support and monitor student progression. The grading and degree classification systems are comparable to other national and international Higher Education Institutions.

### Strengths

Student admission is competitive. There is a low student to teacher ratio, which contributes to a positive atmosphere of trust, focused teaching and room for dialogue and support for students.

Students completing the program receive recognition through the accreditation process by the national and international bodies, including the Technical Chamber of Cyprus (ETEK), which is the engineering regulatory body in Cyprus.

According to students' feedback during this evaluation process, the EEC has observed a high level of satisfaction among students, regarding the program and the support they receive.

### Areas of improvement and recommendations (suggestions have been numbered for easy reference)

1. A formal feedback on assessed coursework and assignments should be consistently provided in all modules.
2. The EEC recommends the development of an action plan to help increase the number of applicants and of enrolled students over the next few years. Some initiatives could be devised to help attract more female applicants. Examples of such initiatives include: (a) using the current female students and female graduates as "ambassadors" and inviting them to go back to their high school to talk to and inspire high school students,

especially females; (b) setting up a gender-balanced focus group of high school and university students in order to gain insights into what aspects of computer science and engineering would attract female students and how these should be communicated to them; (c) having a gender-balanced website and external presence of the university in broader activities, to the extent that this is possible.

3. To attract larger numbers of students, it may be helpful to enrich courses with hot topics in the field, and to actively promote and advertise the positive values and high potential of this program to prospective students and relevant stakeholders.

### *Responses to suggestions for improvement and recommendations*

1. The evaluation committee suggests formal feedback on assessed coursework and assignments. Formal feedback can be produced by experts in each field. Currently our understaffed department is not able to perform objective assessment, so there is need for external consultation. This is currently not supported centrally in terms of procedures and possible reimbursement of external experts. The department notes the suggestion and will forward it to CUT's Senate committee of Undergraduate Studies for further consultation and handling.
2. There is already an action plan in the department for attracting higher calibre students from the local educational system. This plan includes invited lectures to focus groups on Computer Science and Informatics being formed at the Cypriot high-schools, participation in annual high-school student competitions (such as on Computer Games development) and organizing tours at our premises and labs for high-school students visiting our department. Due to the covid-19 virus outbreak, the above activities were postponed during the last two years. According to the revised health protocols issued recently by the Ministry of Health and the University, it is anticipated that these activities will resume soon. As regards attracting more female high-school students, we have started thinking of ways to create female ambassadors, either physical or virtual. For example, we plan to create short videos of female university students sharing their experiences and breaking any barriers or psychological obstacles present for female high school students to join engineering departments. This will be organized in close collaboration with the respective services of CUT that are responsible for branding and public relations of the university. Also, we will investigate the potential of sending female students back to their high-school to talk to and inspire high-school students, or of utilizing them in the tours taking place at our premises to encourage females to consider the department for their university studies. As for a gender-balanced website, this is something that has already been taken into consideration by the IT department who is responsible for the development and update of electronic content, in close collaboration with the departments (e.g. photos of female students).
3. The number of students is defined by the state. The only thing that we could do as a department is to improve our newcomers in terms of grades scored in the entrance exams. This is already covered in point (2) above with the action plan currently being followed. Finally, it should be noted that the program of studies is revised periodically to allow for enriching existing courses with hot topics in the field.

## 5. Learning resources and student support

(ESG 1.6)

### Findings

Overall, students receive high-quality theoretical training on all key areas of Computer Science although specific modules i.e. Python is not offered as core modules. Modules' titles and contents are consistent with the expectations of a high-quality degree offering. Adequate and modern learning resources are available to the students, including the following: facilities, library, infrastructure, student welfare, academic mentoring. All facilities are fit for purpose to achieve the course learning outcomes with a student-centred approach.

### Strengths

The Department uses computer laboratories, designated areas for group and individual work, a library, rooms for developing learning skills, and research spaces. The Department periodically assesses the adequacy and suitability of these resources and informs the responsible services of the University for their actions. The Department has established a process to promote requests for the continuous upgrading and maintenance of laboratories and equipment, and for the unimpeded access of students to the workshops.

Structure of the programme of study and its delivery is in accordance with that of the institution's standards.

Students appear very satisfied with the programme, the teaching staff, and their interactions with the teaching staff.

All regulations supporting student progress and satisfaction monitoring are in place.

### Areas of improvement and recommendations (suggestions have been numbered for easy reference)

1. Student welfare mechanisms, for monitoring the sufficiency of student support are in place. Nevertheless, the above mentioned recommendation to introduce an EDI Committee will strengthen this area.
2. The panel recommends in the future, when the staff members and the curriculum modules advance in numbers, to consider a formal T&L Committee to monitor the T&L processes, curriculum review and resources at all stages taking into account the student and staff feedback with inclusion of an official industry advisory Board and External examiner. It is recommended to have in place procedures, appropriate training, guidance and support, for teaching personnel, to enable personnel to efficiently support the educational process.
3. Although each student has an academic mentor, there has been scientific evidence that students benefit from the inclusion of student mentors in the support services of the department, where the mentor is at a higher stage of studies (student buddy system).
4. The School should consider a rigorous process of data collection in terms of reviewing the pipeline from undergraduate students to postgraduate, research and staff members. There is an under representation of female students and staff in the department and actions should be taken in order to change the picture of the school, where the students and the staff can identify themselves within the computer science department identity.

### Responses to suggestions for improvement and recommendations

1. This recommendation has been answered in section 1, point (1) of the responses. The department, through its Undergraduate Studies committee, will collaborate closely with senate committees and officers at the Students Welfare Services for EDI matters, as well as take into consideration the findings of other initiatives and/or relevant EU-funded projects, to address EDI aspects.
2. The suggestion is noted for the future. As soon as the department grows enough in number of teaching staff, a formal T&L Committee will be formed to monitor the T&L processes, curriculum review and teaching resources. This committee will also consider any student and staff feedback available, and will also consult industrial and market professionals. The support of external examiners and/or procedures for training, guidance and support of the teaching personnel, as mentioned earlier, has to be decided centrally and possibly be included in the university law so as to avoid possible contradiction with current legislation.
3. The suggestion of student-to-student mentoring could indeed benefit students. This, of course, is something that cannot be enforced and must be discussed with students' representatives. The department will raise this topic in upcoming meetings of the department's council and if students agree then a formal procedure for assigning student mentors will be set-up and followed in the future. We would also like to mention that the senate committee on studies is currently discussing how to enhance and enrich mentoring activities.
4. The department will forward this suggestion to the School of Engineering for establishing a rigorous process of data collection in terms of reviewing the career development pipeline from undergraduate students to postgraduate, research and staff members. Possibly this suggestion was made for other departments in the School of Engineering that went through a similar procedure of evaluation and accreditation, and, therefore, this process will also improve their internal procedures as well. As regards the under representation of female students and staff in the department, this issue has been covered in the responses provided in section 2 - point (3) and section 3 - point (2). It is a quite well-known problem for the whole School, not only our department, and we consider it to be a global phenomenon. Appropriate actions with female ambassadors, in physical or virtual form (e.g. short videos), will be forwarded for discussion at School council meetings, so that these actions are taken in the near future to try and change this picture.

6. Additional for doctoral programmes

*(ALL ESG)*

N/A



**7. Eligibility (Joint programme)**  
(*ALL ESG*)

N/A

## B. Conclusions and final remarks

The EEC reviewed and examined the materials provided by the Cyprus University of Technology pertaining to its four-year Bachelor's Degree Program in Computer Engineering and Informatics of the Department of Electrical Engineering, Computer Engineering and Informatics. The one-day site visit was held on 16.6.2021.

The EEC was presented with detailed information about the degree program. During the site visit, the EEC met university, school and department leadership peers and met professors, teachers and administrators. It also met current and past students of the program.

Based on the examination and evaluation of the accreditation materials and the remote site visit, the EEC concludes that the required standards are met with the exception of staff development, which is partially met.

The EEC identified the following key strengths:

- In the program structure there is evidence of a particularly positive synergy with Electrical Engineering, that already provides a good specialisation and can provide the opportunity for the revision and enhancement of the program aimed at maintaining and improving an excellent graduate employability.
- There is a low student to staff ratio and students have commented that the instructors are accessible and the department provides a supportive environment.
- The program is accredited by ETEK and there is evidence of excellent employability of the graduates.
- There is evidence of excellent research activities, from which the UG students can benefit indirectly (research informed teaching) and directly with their involvement in research projects.
- As a whole, the teaching staff is highly commended by the students for the particularly friendly and supportive environment.

The EEC also identified a number of key areas for improvement and therefore, the following recommendations are made:


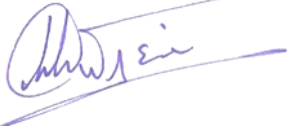
1. A program review process should be periodically carried out to provide a strategic direction of development towards some important thematic areas, such as AI/ML, Cybersecurity and IoT.
2. A course dedicated to the programming language Python should be introduced.
3. A formal industry advisory board should be introduced to work in association with the Teaching & Learning (T&L) Committee to provide feedback for a periodic curriculum review.
4. Additional key appointments will help to develop the program in some strategic directions and improve the ratio between permanent and non-permanent teaching staff.
5. Student feedback should be aggregated, summarised and communicated back to the students. Student feedback should also be explicitly considered in the program review process.
6. The development of central and departmental support for new staff to provide induction and mentoring. In particular, a minimum of didactic & pedagogical training should be compulsory to all new staff.
7. The department should develop a policy for staff peer review of teaching.
8. An Equality, Diversity and Inclusion (EDI) Committee should be introduced to provide support to the students and staff members. The development of an action plan should be devised to help improve diversity and inclusion, and, in particular, to increase the numbers of female students and staff members.

## **Responses to the recommendations of conclusions**

All recommendations made in the conclusions have been addressed in depth within the relative section as follows:

1. Section 1, points (1) and (2)
2. Section 1, point (3)
3. Section 5, point (2)
4. Section 3, point (4)
5. Section 3, point (3)
6. Section 3, point (2)
7. Section 3, point (2)
8. Section 2, point (1)

### C. Higher Education Institution academic representatives

<i>Name</i>	<i>Position</i>	<i>Signature</i>
Takis Kasparis	Professor, Chair	
Andreas Andreou	Professor, Vice Chair, Coordinator of CEI degree	

**Date:** 24/9/2021

# APPENDIX



## CYPRUS UNIVERSITY OF TECHNOLOGY - ANNOUNCEMENT OF ACADEMIC POSITION

Applications are invited from candidates who possess the necessary qualifications in order to fill the following academic position at the Cyprus University of Technology:

### DEPARTMENT OF ELECTRICAL ENGINEERING, COMPUTER ENGINEERING AND INFORMATICS

#### FACULTY OF ENGINEERING AND TECHNOLOGY

- **One (1) position at the rank of Assistant Professor or Lecturer** in the specialization:  
**'Cybersecurity and privacy (software security and/or hardware security and/or cryptography and/or quantum cryptography and/or privacy-preserving technologies and/or smart cybersecurity)'**

Applicants for all academic positions should have a doctorate degree from a recognized University in Computer Science or Computer Engineering. The university reserves the right to request recognition of the doctorate degree from the Cyprus Council for the Recognition of Higher Education Qualifications (K.Y.S.A.T.S). The minimum qualifications that are required for each academic position, including publications and academic experience, are detailed on the University's webpage: <https://www.cut.ac.cy/university/administration/administrative-services/hr/jobs/staff-categories/academic-staff-qualifications/?languageId=1> These qualifications are based on the candidate's years of academic experience, his/her research and scientific contribution.

***The candidates will be assessed only for the rank or the ranks for which they have applied.***

Citizenship of the Republic of Cyprus is not required.

According to the Cyprus University of Technology Law, the language of instruction at the University is either Greek or Turkish. For the current position, good knowledge of the Greek language is required; evidence is provided in the relevant circular by the Public Service Commission, or B2 Level according to the Common European Framework of Reference (CEFR).

In case an elected candidate does not have a good knowledge of Greek language based on the criteria set above, it is his/her obligation upon his/her election to achieve it within three years time, with the commitment of the relevant Academic Department.

#### **The annual gross salary for each position (including the 13th salary) is:**

<b><u>Rank</u></b>	<b><u>Scale</u></b>	<b><u>Salary EUR</u></b>
Assistant Professor	(Scale A13 – A14)	€58.428 - €78.799
Lecturer	(Scale A12 – A13)	€44.408 - €72.265

From this amount, employee contributions to Government Funds as well as Income Tax will be deducted, according to the legislation into effect.

It is expected that the successful candidate will be available by January 2022, unless otherwise agreed.

**The applicants must upload the following documents (as separate PDF Files) in English, no later than 1 July 2021 (at 23:59), at the following link <https://www.cut.ac.cy/jobs>:**

1. A letter in which candidates should state the Department, the rank, the specialization in which they are interested in, as well as the date on which they can undertake responsibilities in case they are elected
2. Curriculum vitae which will include list of publications where applicable. The CV must also include detailed information in regard to previous employment such as: Position, organization/university, exact dates of employment, whether it is full-time or part-time (hours per week or per month must be specified) employment.
3. A short review of their research interests as well as a brief description of their future research plans - up to 500 words

4. Three representative scientific publications of their work. This is not obligatory for candidates who apply for the position of Lecturer
5. Copies of the candidate's degree certificates
6. Contact Details
7. Names and email addresses of at least three academics, who, upon submission of the application, will be automatically notified to submit confidential reference letters in English, within seven (7) days from the deadline of the submission of applications.

The University may also request reference letters from independent referees of the choice of members of the Special Committee, if considered necessary.

*Applications, documents as well as reference letters that were submitted for previous position advertisements **will not be taken into consideration.***

**Please note that it is the applicants' responsibility to ensure that their application has been successfully uploaded and submitted with all the required documents. Upon successful submission of the application, the applicant will receive an automated confirmation by email.**

For further information you may contact the HR Department by e-mail at [recruitment@cut.ac.cy](mailto:recruitment@cut.ac.cy) or at 357 25002406.

It is noted that:

- The University adopts an equal opportunity policy at recruitment and the subsequent career stages and encourages both genders to submit an application for all levels of Academic and Administrative Staff.
- The University does not discriminate in any way on the basis of gender, religion or belief, ethnic, national or social origin, age, physical ability, marital status and sexual orientation.