

Doc. 300.1.1/3

Date: 2<sup>nd</sup> October 2022

# External Evaluation Report

(Joint - conventional -  
face-to-face programme of  
study)

- **Higher Education Institution:**  
Cyprus University of Technology
- **Collaborative Institution(s):**  
Hangzhou Dianzi University (China)
- **Town:** Limassol
  
- **School/Faculty (if applicable):** Faculty of Engineering  
and Technology
  
- **Department/ Sector:** Department of Electrical  
Engineering and Computer Engineering and  
Informatics
  
- **Programme of study- Name (Duration, ECTS, Cycle)**

**In Greek:**

Programme Name

**In English:**

Electronic Science & Technology (3 years, 118 ECTS,  
MSc)

- **Language(s) of instruction:** English
- **Programme's status:** New
- **Concentrations (if any):**



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 2021 [L.136(I)/2015 – L.132(I)/2021].

**In Greek:** Concentrations

**In English:** Concentrations



## A. Introduction

*This part includes basic information regarding the onsite visit.*

The External Evaluation Committee (EEC) would like to thank the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) for the invitation to evaluate this joint MSc in Electronic Science and Technology. This is a new programme that is currently being accredited in Cyprus.

The evaluation that took place online on the 21st of September 2022 and the evaluation focused on the setup / implementation of the programme and the established collaboration between the respective partners: the Cyprus University of Technology and Hangzhou Dianzi University (China).

The agenda included several meetings with the senior management, the program coordinators, teaching faculty, current students, and administrative personnel – in all areas with representatives from both the Cypriot and Chinese side. The evaluation and the findings and recommendations of this report were based on the meetings conducted and the evidence provided in the form of the self-evaluation report.

Given the on-going pandemic restrictions, the evaluation took place online. Consequently, the EEC did not have the opportunity to visit the University and experience in-person the on-offer services and infrastructure. Still, panoramic video captures of teaching, administration, laboratories, and social spaces were provided. These were considered sufficient for the purposes of this evaluation.

The report discusses areas of strength and areas that further consideration may be required. The EEC provides several constructive suggestions as to how the Cyprus University of Technology and Hangzhou Dianzi University (China) could address the points raised.

If the two Institutions or the CYQAA have any queries with regards to the report, the EEC members will be more than happy to attend to them in due course.



## B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
<b>Michael A. E. Andersen</b>	Professor	Technical University of Denmark
<b>George K. Karagiannidis</b>	Professor	Aristotle University of Thessaloniki
<b>Zhiguo Ding</b>	Professor	University of Manchester
<b>Ioannis Chrysostomou</b>	Student	University of Cyprus
<b>Name</b>	Position	University
<b>Name</b>	Position	University

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

- *The external evaluation report follows the structure of assessment areas.*
- *At the beginning of each assessment area there is a box presenting:*
  - (a) sub-areas*
  - (b) standards which are relevant to the European Standards and Guidelines (ESG)*
  - (c) some questions that EEC may find useful.*
- *The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.*
- *Under each assessment area, it is important to provide information regarding the compliance with the requirements of each sub-area. In particular, the following must be included:*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

- *The EEC should state the compliance for each sub-area (Non-compliant, Partially compliant, Compliant), which must be in agreement with everything stated in the report. It is pointed out that, in the case of standards that cannot be applied due to the status of the HEI and/or of the programme of study, N/A (= Not Applicable) should be noted.*
- *The EEC should state the conclusions and final remarks regarding the programme of study as a whole.*
- *The report may also address other issues which the EEC finds relevant.*

## 1. Study programme and study programme's design and development (ESG 1.1, 1.2, 1.7, 1.8, 1.9)

### Sub-areas

- 1.1 Policy for quality assurance
- 1.2 Design, approval, on-going monitoring and review
- 1.3 Public information
- 1.4 Information management

### 1.1 Policy for quality assurance

#### Standards

- *Policy for quality assurance of the programme of study:*
  - *has a formal status and is publicly available*
  - *supports the organisation of the quality assurance system through appropriate structures, regulations and processes*
  - *supports teaching, administrative staff and students to take on their responsibilities in quality assurance*
  - *ensures academic integrity and freedom and is vigilant against academic fraud*
  - *guards against intolerance of any kind or discrimination against the students or staff*
  - *supports the involvement of external stakeholders*

### 1.2 Design, approval, on-going monitoring and review

#### Standards

- *The programme of study:*
  - *is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes*
  - *is designed by involving students and other stakeholders*
  - *benefits from external expertise*
  - *reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)*
  - *is designed so that it enables smooth student progression*
  - *is designed so that the exams' and assignments' content corresponds to the level of the programme and the number of ECTS*
  - *defines the expected student workload in ECTS*
  - *includes well-structured placement opportunities where appropriate*
  - *is subject to a formal institutional approval process*

- *results in a qualification that is clearly specified and communicated, and refers to the correct level of the National Qualifications Framework for Higher Education and, consequently, to the Framework for Qualifications of the European Higher Education Area*
- *is regularly monitored in the light of the latest research in the given discipline, thus ensuring that the programme is up-to-date*
- *is periodically reviewed so that it takes into account the changing needs of society, the students' workload, progression and completion, the effectiveness of procedures for assessment of students, student expectations, needs and satisfaction in relation to the programme*
- *is reviewed and revised regularly involving students and other stakeholders*

### 1.3 Public information

#### Standards

- *Regarding the programme of study, clear, accurate, up-to date and readily accessible information is published about:*
  - *selection criteria*
  - *intended learning outcomes*
  - *qualification awarded*
  - *teaching, learning and assessment procedures*
  - *pass rates*
  - *learning opportunities available to the students*
  - *graduate employment information*

### 1.4 Information management

#### Standards

- *Information for the effective management of the programme of study is collected, monitored and analysed:*
  - *key performance indicators*
  - *profile of the student population*
  - *student progression, success and drop-out rates*
  - *students' satisfaction with their programmes*
  - *learning resources and student support available*
  - *career paths of graduates*
  
- *Students and staff are involved in providing and analysing information and planning follow-up activities.*

You may also consider the following questions:

- *What is the procedure for quality assurance of the programme and who is involved?*
- *Who is involved in the study programme's design and development (launching, changing, internal evaluation) and what is taken into account (strategies, the needs of society, etc.)?*
- *How/to what extent are students themselves involved in the development of the content of their studies?*
- *Please evaluate a) whether the study programme remains current and consistent with developments in society (labour market, digital technologies, etc.), and b) whether the content and objectives of the study programme are in accordance with each other?*
- *Do the content and the delivery of the programme correspond to the European Qualifications Framework (EQF)?*
- *How is coherence of the study programme ensured, i.e., logical sequence and coherence of courses? How are substantial overlaps between courses avoided? How is it ensured that the teaching staff is aware of the content and outputs of their colleagues' work within the same study programme?*
- *How does the study programme support development of the learners' general competencies (including digital literacy, foreign language skills, entrepreneurship, communication and teamwork skills)?*
- *What are the scope and objectives of the foundation courses in the study programme (where appropriate)? What are the pass rates?*
- *How long does it take a student on average to graduate? Is the graduation rate for the study programme analogous to other European programmes with similar content? What is the pass rate per course/semester?*
- ***How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?***
- *What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?*
- *Is information related to the programme of study publicly available?*
- *How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?*
- *Have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*
- *What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

The ECC has found that Programme of Electronic Science & Technology has been well planned and structured, which is partially due to the fact that the programme being evaluated is based on the ones which have already being

running at the two universities, namely Cyprus University of Technology (CUT) and Hangzhou Dianzi University (HDU). Both universities have spent a great amount of efforts to ensure that this programme can be offered to students at international standards for topics, quality of teaching, resources, and infrastructures. The faculty members and the administrative staff of the two universities are well experienced for delivering a master-level programme in this particular topic, where the faculty members' expertise is well aligned with the content and the objectives of this evaluated programme. CUT has established a well-structured internal committee for quality assurance. Those good practice from the two universities ensure that this clearly planned and structured programme can be well delivered and maintained.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

CUT has carried out various quality assurance activities to ensure that the programme being evaluated can be delivered at an international standard. For example, the faculty members recognize the importance of the students' feedback, and there is a sufficiently efficient mechanism for feedback, e.g., for each course, students provide their feedback via formal questionnaires and faculty members can adjust their teaching according to this feedback. The students have also been offered good opportunities for industry placements and internships. For example, some students have informed the ECC that they benefited tremendously from those industrial placement and internship during their studies in CUT, from the perspectives of employment and cross-disciplinary research. In addition, the faculty members have tried to bridge the gap between teaching and research, by feeding their research to their teaching.

Another good practice from CUT is that there are plenty of interactions between academic staff and students, due to the small class size. Given the fact that the size of the cohort for this evaluated programme is also small for the next few years, the students on this programme will also enjoy such interactions. The videos provided to the ECC demonstrate that the two universities have state-of-the-art lab facilities, which has also been confirmed by the students during the virtual visit.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

Once the programme starts, the two universities need to closely monitor how the programme runs, where the courses delivered in this programme need to be regularly reviewed. In addition, the two departments in CUT and HDT may want to create various effective communication mechanisms between the faculty members who deliver the courses, between the staff and the students on the courses, and also between the two universities for better coordination.

The two universities may also want to create a joint exam board, where the delivery of the programme is closely monitored and the assessments of the courses on the programme are carefully moderated. The latter can be particularly important since the faculty members in China and Cyprus might have different ways to mark and different understandings for the distinction/merit levels.

The ECC was informed that the courses to be delivered on this programme are based on those existing ones in the individual departments. This arrangement can ensure that these courses will be effectively delivered by the academic staff with minimized workload, but it is important to ensure that there is no severe overlapping or gap between these courses.



Please select what is appropriate for each of the following sub-areas:

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
1.1	Policy for quality assurance	Compliant
1.2	Design, approval, on-going monitoring and review	Compliant
1.3	Public information	Compliant
1.4	Information management	Compliant

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

### Sub-areas

#### 2.1 Process of teaching and learning and student-centred teaching methodology

#### 2.2 Practical training

#### 2.3 Student assessment

### 2.1 Process of teaching and learning and student-centred teaching methodology

#### Standards

- *The process of teaching and learning supports students' individual and social development.*
- *The process of teaching and learning is flexible, considers different modes of delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.*
- *Students are encouraged to take an active role in creating the learning process.*
- *The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.*
- *Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.*
- *Mutual respect within the learner-teacher relationship is promoted.*
- *The implementation of student-centred learning and teaching respects and attends to the diversity of students and their needs, enabling flexible learning paths.*
- *Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.*

### 2.2 Practical training

#### Standards

- *Practical and theoretical studies are interconnected.*
- *The organisation and the content of practical training, if applicable, support achievement of planned learning outcomes and meet the needs of the stakeholders.*

### 2.3 Student assessment

#### Standards

- *Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures.*
- *Assessment is appropriate, transparent, objective and supports the development of the learner.*

- *The criteria for the method of assessment, as well as criteria for marking, are published in advance.*
- *Assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process.*
- *Assessment, where possible, is carried out by more than one examiner.*
- *A formal procedure for student appeals is in place.*
- *Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field.*
- *The regulations for assessment take into account mitigating circumstances.*

*You may also consider the following questions:*

- *How is it monitored that the teaching staff base their teaching and assessment methods on objectives and intended learning outcomes? Provide samples of examination papers (if available).*
- *How are students' different abilities, learning needs and learning opportunities taken into consideration when conducting educational activities?*
- *How is the development of students' general competencies (including digital skills) supported in educational activities?*
- *How is it ensured that innovative teaching methods, learning environments and learning aids that support learning are diverse and used in educational activities?*
- *Is the teaching staff using new technology in order to make the teaching process more effective?*
- *How is it ensured that theory and practice are interconnected in teaching and learning?*
- *How is practical training organised (finding practical training positions, guidelines for practical training, supervision, reporting, feedback, etc.)? What role does practical training have in achieving the objectives of the study programme? What is student feedback on the content and arrangement of practical training?*
- ***Are students actively involved in research? How is student involvement in research set up?***
- *How is supervision of student research papers (seminar papers, projects, theses, etc.) organised?*
- ***Do students' assessments correspond to the European Qualifications Framework (EQF)?***
- *How are the assessment methods chosen and to what extent do students get supportive feedback on their academic progress during their studies?*
- *How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

The program's duration is 3 years (1+1+1). The first year is dedicated on course teaching at HDU. CUT offers 7 courses and the HDU 6 courses. At the end of the first year, students need to submit a thesis proposal in coordination with teaching staff at CUT. The second year is spent at CUT for completion the thesis under the

supervision of CUT staff. At the end of the second year, the students will have a mid-examination of their thesis work. In the third year, students shall complete practical work as an extension of their thesis research at HDU and continue to finalize and defend the dissertation. This 3-years structure is not very usual, but it seems that satisfy all the requirements of this specific joint initiative, between an EU and a Chinese university.

The EEC found the students' admission process robust and reliable. It is very positive that admission is based on the student's ability to benefit through motivation and commitment. Students applying for the joint MSc must have a recognized degree in Electrical Engineering, Computer Engineering and Informatics, or other related disciplines, with a minimum cumulative average 6.5/10. Also, a proof of English of knowledge of the English language is required, following several reliable certificates and exams.

Regarding student progress there are clear policies and methods. The classification systems according to grading are completely in line with the international standards. It is very important that students' progression is supported and monitored by Academic advisors in an annually basis. The assessment methods include Final Exams, Coursework (reports, assignments, in-class tests, hardware, and software projects) and Presentations.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

The title and the curriculum fully meet the objectives of the program. The purpose and learning outcomes of the curriculum are described clearly and convincingly, combining theory and practice in the Labs.

The responsible program coordinators from the two institutions are clearly designated with specific responsibilities and the EEC found that they operate in a spirit of cordial cooperation and understanding.

Students have access to excellent learning and laboratory facilities, both in Cyprus and China.

It is worth noting that the Credit Units system (ECTS) is implemented.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

Regarding the internal evaluation of the study programs, relevant questionnaires are provided for both the students and the teachers, as well as for the periodic control by the Internal Quality Committee. Given, however, the different traditions of the two cooperating institutions in terms of evaluation, it is necessary to adopt specific common procedures for the evaluation of the proposed program in both sides.

The programme covers very well fundamental areas on modern electronics science. However, a stronger connection with industry, perhaps though performing some of the Theses in collaboration with industry, could offer the students useful insights on industry practices.

The program could invite well-known Professors and researchers to give lectures, could participate in joint international research projects between Cyprus and China and other forms of cooperation.

Special attention should be given in the selected course, in order to give to students, the opportunity to broad their knowledge in the field of the program

Please select what is appropriate for each of the following sub-areas:

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
2.1	Process of teaching and learning and student-centred teaching methodology	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Compliant

### 3. Teaching staff (ESG 1.5)

<u>Sub-areas</u>
3.1 Teaching staff recruitment and development
3.2 Teaching staff number and status
3.3 Synergies of teaching and research

3.1 Teaching staff recruitment and development
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### Standards

- *Institutions ensure the competence of their teaching staff.*
- *Fair, transparent and clear processes for the recruitment and development of the teaching staff are set up.*
- *Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.*
- *The teaching staff is regularly engaged in professional and teaching-skills training and development.*
- *Promotion of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.*
- *Innovation in teaching methods and the use of new technologies is encouraged.*
- *Conditions of employment that recognise the importance of teaching are followed.*
- *Recognised visiting teaching staff participates in teaching the study programme.*

### **3.2 Teaching staff number and status**

#### Standards

- *The number of the teaching staff is adequate to support the programme of study.*
- *The teaching staff status (rank, full/part time) is appropriate to offer a quality programme of study.*
- *Visiting staff number does not exceed the number of the permanent staff.*

### **3.3 Synergies of teaching and research**

#### Standards

- *The teaching staff collaborate in the fields of teaching and research within the HEI and with partners outside (practitioners in their fields, employers, and staff members at other HEIs in Cyprus or abroad).*
- *Scholarly activity to strengthen the link between education and research is encouraged.*
- *The teaching staff publications are within the discipline.*
- *Teaching staff studies and publications are closely related to the programme's courses.*
- *The allocation of teaching hours compared to the time for research activity is appropriate.*

*You may also consider the following questions:*

- *How are the members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?*
- *How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?*
- *Is teaching connected with research?*

- *Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?*
- *What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?*
- *Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

The EEC considered the submitted documentation and met with staff in both universities to understand the clarity and fairness of the approach on how they recruit and support academic staff in delivering high quality teaching and research.

The new teaching staff will be assessed by the Joint Managerial Committee (JMC) based on teaching experience, relevance to taught subjects, and research affinity. When a member of staff departs from the department a suitable candidate will be proposed by the institute responsible for the courses taught by the teaching staff.

There are 6 Professors from CUT and 16 Professors from HDU, which are involved in the program. Their CVs demonstrate very good evidence of appointed academic staff, having prior and relevant teaching and research experience in higher education institutions and are members of professional organizations (e.g. IEEE). Their research expertise and publication records are relevant and consistent to the program.

There is a student survey which gathers student feedback, and it is used as part of the annual programmes of study review and self-assessment. There are teaching and observation peer review procedures.

From the interview with the students in both sides the EEC concludes that the teaching staff is highly commended by the students.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

Staff expertise and relevance to the proposed joint program, both from the two parts.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

The EEC recommends the development of a systematic central support from the JMC, regarding to staff induction and staff development.

**Please select what is appropriate for each of the following sub-areas:**



Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
3.1	Teaching staff recruitment and development	Compliant
3.2	Teaching staff number and status	Compliant
3.3	Synergies of teaching and research	Compliant

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

##### Sub-areas

- 4.1 Student admission, processes and criteria
- 4.2 Student progression
- 4.3 Student recognition
- 4.4 Student certification

##### 4.1 Student admission, processes and criteria

###### Standards

- *Pre-defined and published regulations regarding student admission are in place.*
- *Access policies, admission processes and criteria are implemented consistently and in a transparent manner.*

##### 4.2 Student progression

###### Standards

- *Pre-defined and published regulations regarding student progression are in place.*
- *Processes and tools to collect, monitor and act on information on student progression, are in place.*

##### 4.3 Student recognition

###### Standards

- *Pre-defined and published regulations regarding student recognition are in place.*
- *Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.*
- *Appropriate recognition procedures are in place that rely on:*
  - *institutional practice for recognition being in line with the principles of the Lisbon Recognition Convention*
  - *cooperation with other institutions, quality assurance agencies and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country*

##### 4.4 Student certification

###### Standards

- *Pre-defined and published regulations regarding student certification are in place.*

- *Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.*

*You may also consider the following questions:*

- *Are the admission requirements for the study programme appropriate? How is the students' prior preparation/education assessed (including the level of international students, for example)?*
- *How is the procedure of recognition for prior learning and work experience ensured, including recognition of study results acquired at foreign higher education institutions?*
- *Is the certification of the HEI accompanied by a diploma supplement, which is in line with European and international standards?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

This MSc joint teaching programme seems to be in a very good shape. The two departments in CUT and HDT have built excellent track records in Cyprus and China, respectively. Therefore, the joint programme is expected to attract excellent students and study progression is expected to be good. The departments have made clear criteria for admission, which are appropriate. In addition, the criteria have been made clear to the potential applicants. All rules and good practices in the two departments should be working for this new programme. It is expected that there be a plethora of ways to collect, monitor and act on information related with student progression.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

HDU has set a clear and appropriate English entry requirement, which ensures that appropriate students can be selected and progressed smoothly on this English programme.

Students completing the program will receive two degrees which will be recognized in both Cyprus and China. During the meeting with the students in the two departments, the ECC has observed a high level of satisfaction among students, regarding the support they received. Furthermore, the degree program has a good structure, and will be regularly reviewed to ensure industry relevance. Finally, teaching processes and practices in place, are in line with the expected world-standards in this sector.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

The two departments in CUT and HDU have estimated the initial cohort size of this evaluated programme will be around 20 students. The departments may want to strengthen their marketing efforts and build more concrete plans for increasing the cohort size in the future.

In addition, the departments may want to take more steps and make the students enrolled on this programme more diversified.

Please select what is appropriate for each of the following sub-areas:

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
4.1	Student admission, processes and criteria	Compliant
4.2	Student progression	Compliant
4.3	Student recognition	Compliant
4.4	Student certification	Compliant

## 5. Learning resources and student support (ESG 1.6)

### Sub-areas

- 5.1 Teaching and Learning resources
- 5.2 Physical resources
- 5.3 Human support resources
- 5.4 Student support

### 5.1 Teaching and Learning resources

#### Standards

- *Adequate and readily accessible teaching and learning resources (teaching and learning environments, materials, aids and equipment) are provided to students and support the achievement of objectives in the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing the learning resources.*

### 5.2 Physical resources

#### Standards

- *Physical resources, i.e. premises, libraries, study facilities, IT infrastructure, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

### 5.3 Human support resources

#### Standards

- *Human support resources, i.e. tutors/mentors, counsellors, other advisers, qualified administrative staff, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

### 5.4 Student support

#### Standards

- *Student support is provided covering the needs of a diverse student population, such as mature, part-time, employed and international students and students with special needs.*
- *Students are informed about the services available to them.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing student support.*
- *Students' mobility within and across higher education systems is encouraged and supported.*

*You may also consider the following questions:*

- *Evaluate the supply of teaching materials and equipment (including teaching labs, expendable materials, etc.), the condition of classrooms, adequacy of financial resources to conduct the study programme and achieve its objectives. What needs to be supplemented/ improved?*
- *What is the feedback from the teaching staff on the availability of teaching materials, classrooms, etc.?*
- *Are the resources in accordance with actual (changing) needs and contemporary requirements? How is the effectiveness of using resources ensured?*
- *What are the resource-related trends and future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.)? How are these trends taken into account and how are the risks mitigated?*

- *Evaluate student feedback on support services. Based on student feedback, which support services (including information flow, counselling) need further development?*
- *How is student learning within the standard period of study supported (student counselling, flexibility of the study programme, etc.)?*
- *How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)?*
- *How is student mobility being supported?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

During the virtual tour through the two departments, observing the resources and facilities, and asking questions to the members of academic and administrative staff and to some present students, the overall perception is that both departments have adequate resources and infrastructures to meet the present requirements. The departments are effective and professional in their learning and teaching activities.

The teaching rooms are suitable for theoretical, practical and laboratory lessons. The teaching and research staff have the required qualifications, sufficient professional experience, and expertise to teach this joint program of study. As evident by their CVs, the scientific merits of the staff are of high standards. Physical resources and support services to the students are adequate.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

This new joint program has a very good structure and support governed by the Joint Managerial Committee. The program's support staffs from both universities have clearly the needed experience and expertise to deal with the specific issues and challenges that arise due to any circumstances surrounding this new joint program. Their interactions seem smooth and the on-site participation of Faculties from Cyprus to China seems to be ready. A key strength in both department's learning and teaching activities is the academic support given to students throughout their studies. Students are highly satisfied with the quality of learning and teaching resources. The demonstrated team's engagement, experience and expertise are important when it comes to dealing with any problems that may arise.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

It is highly recommended to ensure to have the teaching resources that can and will go to China to teach for the required periods.

**Please select what is appropriate for each of the following sub-areas:**



Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
5.1	Teaching and Learning resources	Compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Compliant

## 6. Additional for doctoral programmes (ALL ESG)

### Sub-areas

#### 6.1 Selection criteria and requirements

#### 6.2 Proposal and dissertation

#### 6.3 Supervision and committees

### 6.1 Selection criteria and requirements

#### Standards

- *Specific criteria that the potential students need to meet for admission in the programme, as well as how the selection procedures are made, are defined.*
- *The following requirements of the doctoral degree programme are analysed and published:*
  - *the stages of completion*
  - *the minimum and maximum time of completing the programme*
  - *the examinations*
  - *the procedures for supporting and accepting the student's proposal*
  - *the criteria for obtaining the Ph.D. degree*

### 6.2 Proposal and dissertation

#### Standards

- *Specific and clear guidelines for the writing of the proposal and the dissertation are set regarding:*
  - *the chapters that are contained*
  - *the system used for the presentation of each chapter, sub-chapters and bibliography*
  - *the minimum word limit*
  - *the binding, the cover page and the prologue pages, including the pages supporting the authenticity, originality and importance of the dissertation, as well as the reference to the committee for the final evaluation*
- *There is a plagiarism check system. Information is provided on the detection of plagiarism and the consequences in case of such misconduct.*
- *The process of submitting the dissertation to the university library is set.*

### 6.3 Supervision and committees

#### Standards

- *The composition, the procedure and the criteria for the formation of the advisory committee (to whom the doctoral student submits the research proposal) are determined.*
- *The composition, the procedure and the criteria for the formation of the examining committee (to whom the doctoral student defends his/her dissertation), are determined.*
- *The duties of the supervisor-chairperson and the other members of the advisory committee towards the student are determined and include:*
  - *regular meetings*
  - *reports per semester and feedback from supervisors*
  - *support for writing research papers*

- *participation in conferences*
- *The number of doctoral students that each chairperson supervises at the same time are determined.*

*You may also consider the following questions:*

- *How is the scientific quality of the PhD thesis ensured?*
- *Is there a link between the doctoral programmes of study and the society? What is the value of the obtained degree outside academia and in the labour market?*
- *Can you please provide us with some dissertation samples?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

Not applicable

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

Not applicable

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

Not applicable

**Please select what is appropriate for each of the following sub-areas:**

<b>Sub-area</b>		<b><i>Non-compliant/ Partially Compliant/Compliant</i></b>
<b>6.1</b>	Selection criteria and requirements	Not applicable
<b>6.2</b>	Proposal and dissertation	Not applicable
<b>6.3</b>	Supervision and committees	Not applicable

## 7. Eligibility (*ALL ESG*)

### Sub-areas

**7.1 Legal framework and cooperation agreement**

**7.2 The joint programme**

**7.3 Added value of the joint programme**

### **7.1 Legal framework and cooperation agreement**

#### Standards

- *The joint programme is offered in accordance with legal frameworks of the relevant national higher education systems.*
- *The terms and conditions of the joint programme are laid down in a cooperation agreement. The agreement in particular covers the following issues:*
  - *Denomination of the degree(s) awarded in the programme*
  - *Coordination and responsibilities of the partners involved regarding management and financial organisation, including funding, sharing of costs and income, resources for mobility of staff and students*
  - *Admission and selection procedures for students*
  - *Mobility of students and teaching staff*
  - *Examination regulations, student assessment methods, recognition of credits and degree awarding procedures*
  - *Handling of different semester periods, if existent*

### **7.2 The joint programme**

#### Standards

- *The partner universities apply joint internal quality assurance processes.*
- *The joint programme is offered jointly, involving all cooperating universities in the design, delivery and further development of the programme.*
- *Aims and learning outcomes are clearly stated, including a joint syllabus, language policy, as well as an account of the intended added value of the programme.*
- *Study counselling and mobility plans are efficient and take into account the needs of different kinds of students.*

### **7.3 Added value of the joint programme**

#### Standards

*The joint programme leads to the following added values:*

- *Increases internationalisation at the institutions.*
- *Stimulates multinational collaboration on teaching at a high level and makes cooperation binding.*
- *Increases transparency between educational systems.*

- *Develops study and research alternatives in accordance with emerging needs.*
- *Improves educational and research collaboration.*
- *Offers students an expanded and innovative arena for learning.*
- *Increases highly educated candidates' employability and motivation for mobility in a global labour market.*
- *Increases European and non-European students' interest in the educational programme.*
- *Increases competence at partner institutions through cooperation and implementation of a best practice system.*
- *Increases the institution's ability to change in step with emerging needs.*
- *Contributes to tearing down cultural barriers, both personal and institutional.*

*You may also consider the following questions:*

- *Does the joint study programme conform to the requirements of a study programme offered at the specific level?*
- *Is there a system that assures the quality of joint provision and guarantees that the aims of the programme are met?*
- *Do the mechanisms for ensuring the quality of the joint study programme take into consideration the European Standards and Guidelines (ESG)? Are they adopted by all the universities involved?*
- *Is the division of responsibilities in ensuring quality clearly defined among the partner universities?*
- *Is relevant information about the programme, e.g. admission requirements and procedures, course catalogue, examination and assessment procedures, well documented and published by taking into account the specific needs of students?*
- *What is the added value of the programme of study?*
- *Is there a sustainable funding strategy among the partner universities? Explain.*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

This is a unique joint MSc program focusing on research and innovation. It is internalization in all senses: interaction with foreign students, teachers, and laboratories as well as cultures.

This joint study program conforms with the ESG as well as with all requirements at master level of study.

A Joint Managerial Committee have been established to handle any issues that may arise.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

Both parties are very strong in research: CUT within EU funding and HDU are within Top-17 in electronics in China, just to mention a few.

Focusing on research and innovation in this joint science and technology program is a strength.

It is also a strength that parties from both sides will experience a lot of internalization – that be both students, faculty, and laboratories.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

As one of the visions of this joint program is to “train future leaders” it could be considered to offer a specific course on management and leadership.

A focus on close collaboration between the master thesis supervisors from both parties during the two-year thesis (first year of the thesis is in Cyprus and second year is in China).

**Please select what is appropriate for each of the following sub-areas:**

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
7.1	Legal framework and cooperation agreement	Compliant
7.2	The joint programme	Compliant
7.3	Added value of the joint programme	Compliant

## D. Conclusions and final remarks

*Please provide constructive conclusions and final remarks which may form the basis upon which improvements of the quality of the programme of study under review may be achieved, with emphasis on the correspondence with the EQF (Consider also the added value of the joint programme).*

The members of the EEC committee found this joint international program to be compliant in all examined aspects. The planned course offerings provide a balance between engineering fundamentals and practice as well as between science and technology. Moreover, active learning is encouraged through lab work and other means presented by the faculty.

The report outlines the key findings, highlights areas of strength and proposes actions to improve things further. We hope that the feedback provided in a constructive manner will drive priorities for future developments of the collaboration and help underpin a positive teaching and research experience for all stakeholders.

The EEC would like to take this opportunity and thank the CYQAA coordinator for managing the process both efficiently and effectively. Finally, once more, should the Cyprus Agency of Quality Assurance and Accreditation in Higher Education require any clarifications with regards to the points raised in the report, the EEC remains at the Agency's disposal.



## E. Signatures of the EEC

<i>Name</i>	<i>Signature</i>
<b>Michael A. E. Andersen</b>	
<b>George K. Karagiannidis</b>	
<b>Zhiguo Ding</b>	
<b>Ioannis Chrysostomou</b>	
Click to enter Name	
Click to enter Name	

**Date:** 2<sup>nd</sup> October 2022