

Doc. 300.3.1/1

Date: October 20th 2021

External Evaluation Report

(Programmatic within the framework of Departmental Evaluation)

- **Higher Education Institution:**
Cyprus University of Technology
- **Town:** Limassol
- **School/Faculty:** Faculty of Engineering and Technology
- **Department:** Electrical Engineering, Computer Engineering & Informatics
- **Programme(s) of study - Name (Duration, ECTS, Cycle)**

Programme 1 – BScEE

In Greek:

Programme Name

In English:

Electrical Engineering (4 academic years/ 240 ECTS, Bachelor)

Language(s) of instruction: Greek

Programme 2 – MScEE

In Greek:

Programme Name

In English:

Electrical Engineering (3 academic semesters/ 90 ECTS, MSc)

Language(s) of instruction: Greek/English

Programme 3 – PhDEECEI

In Greek:

Programme Name

In English:

Electrical Engineering, Computer Engineering and Informatics (3 academic years/ 180 ECTS, Doctorate)

Language(s) of instruction: Greek/English



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. Introduction

This part includes basic information regarding the onsite visit.

The onsite visit was carried out as an online evaluation during the days Wednesday September 29th and Thursday September 30th, 2021, which included various presentations, meetings and video tours all using Zoom.

Before the online visit, the EEC members were provided with relevant program documents and videos to review.

All arrangements were satisfactory, including documentation, presentations, and discussions.

The members of the CUT gave extensive and detailed presentations and were very willing to answer questions asked by the committee. Additional complementary data and information were provided quickly to ensure a seamless evaluation procedure by the committee members. The committee firmly believes that this evaluation report has not been affected by the virtual nature of the visit. This is thanks to the efforts of all the parties involved.

All in all, the EEC found that the CUT has provided comprehensive documentation and information for this evaluation process. The EEC would like to express its gratitude to the CUT colleagues for their efforts in accommodating and facilitating this evaluation of the program of study.

The specific findings and suggestions for further improvement from the EEC are provided in the rest of this report.



B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
Michael A. E. Andersen	Professor	Technical University of Denmark
Zhiguo Ding	Professor	University of Manchester
Emmanouil Kriezis	Professor	Aristotle University of Thessaloniki
Christos Charalambous	Representing ETEK	ETEK
Phivos Hatzilarkou	Student	University of Cyprus
<i>Name</i>	<i>Position</i>	<i>University</i>

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:*
 - sub-areas*
 - standards which are relevant to the European Standards and Guidelines (ESG)*
 - 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 each 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.

Findings for BScEE

The ECC has found that Programme of BSc in Electrical Engineering has been well structured, follows well-established principles, and reflects best practice. It meets the standard expected at international universities. There is a sufficiently efficient mechanism for feedback, where for each course, students provide their feedback via formal questionnaires and faculty members can adjust their teaching according to these feedbacks. The students have also been offered good opportunities for industry placements and internships.

Findings for MScEE

The ECC has found that Programme of MSc in Electrical Engineering has also been well structured and delivered. It meets the standard expected at international universities. There is a sufficiently efficient mechanism for feedback, where for each course, students provide their feedback via formal questionnaires and faculty members can adjust their teaching according to these feedbacks. In addition, the faculty members have tried to bridge the gap between teaching and research, by feeding their research to their teaching. The department has a well-organized administrative team, which support students and staff well. The staff-to-student ratio is high and good for the students' learning experience.

Findings for PhDEECEI

The ECC has found that PhD programme is well structured, follows well-established principles, and reflects best practices. It meets the standard expected at international universities. The department has a clear quality assurance policy for decision-making and monitoring the implementation of this offered study programme.

Strengths

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

Strengths for BScEE

The panel has found that the programmes delivered by the department have been well structured, where the content delivered by the department fits well to the desirable learning outcomes of the programmes.

The department has implemented a few feedback mechanisms which ensure that the department is aware of the students' feedback and carries out student-oriented teaching. In particular, at the end of each term, each student has the opportunities to inform the department about her/his experience by filling a well-designed questionnaire, and teaching staff has the access to these feedback forms for further improving their teaching in the future.



The department has a clear quality assurance policy for decision-making and monitoring the implementation of the offered study programmes. In addition, the assessments and the workload as well as the associated credits are appropriate for the courses offered.

The information related to the study programmes offered by the department, such as credit units, learning outcomes, faculty members' expertise and background, teaching equipment and facilities, student admission criteria, etc, have been made available in the public domain.

The department has also ensured that the students on the study programmes receive adequate support regarding academic, personal problems and difficulties, by assigning students to individual academic advisors.

Strengths for MScEE

The panel has found that the programmes delivered by the department have been well structured, where the content delivered by the department fits well to the desirable learning outcomes of the programmes.

The department has implemented a few feedback mechanisms which ensure that the department is aware of the students' feedback and carries out student-oriented teaching. In particular, at the end of each term, each student has the opportunities to inform the department about her/his experience by filling a well-designed questionnaire, and teaching staff has the access to these feedback forms for further improving their teaching in the future.

The department has a clear quality assurance policy for decision-making and monitoring the implementation of the offered study programmes. In addition, the assessments and the workload as well as the associated credits are appropriate for the courses offered.

The information related to the study programmes offered by the department, such as credit units, learning outcomes, faculty members' expertise and background, teaching equipment and facilities, student admission criteria, etc, have been made available in the public domain.

The department has also ensured that the students on the study programmes receive adequate support regarding academic, personal problems and difficulties, by assigning students to individual academic advisors.

Strengths for PhDECEI

The PhD programme offered by the department has been particularly impressive, where the students benefit from the strong research activities carried out by the faculty members in the department.

The department has also ensured that the students on the study programmes receive adequate support regarding academic, personal problems and difficulties, by assigning students to individual academic advisors.

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.

Areas of improvement and recommendations for BScEE

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

Areas of improvement and recommendations for MScEE

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

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

Areas of improvement and recommendations for PhDEECEI

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

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

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>		
		<i>BScEE</i>	<i>MScEE</i>	<i>PhDEECEI</i>
1.1	Policy for quality assurance	Compliant	Compliant	Compliant
1.2	Design, approval, on-going monitoring and review	Compliant	Compliant	Compliant



1.3	Public information	Compliant	Compliant	Compliant
1.4	Information management	Compliant	Compliant	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 and 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.

Findings for BScEE

The Department clearly benefits from its relatively small staff and from an appropriate staff/student ratio, enabling a high-quality learning and teaching environment to operate in.

Teaching methodologies in use are appropriate. The course portfolio includes a mixed of theory and practical work across various courses.

Student feedback suggests they find interactions between faculty members and students satisfactory.

Faculty members are readily available to students, including an open-door policy.

The process for student assessment is evaluated appropriately.

Findings for MScEE

The Department clearly benefits from its relatively small staff and from an appropriate staff/student ratio, enabling a high-quality learning and teaching environment to operate in. But the low number of MSc students might call for actions to increase the number.

Teaching methodologies in use are appropriate. The course portfolio includes a mixed of theory and practical work across various courses.

Student feedback suggests they find interactions between faculty members and students satisfactory.

Faculty members are readily available to students, including an open-door policy.

The process for student assessment is evaluated appropriately.

Findings for PhDEECEI

The Department clearly benefits from its relatively small staff and from an appropriate staff/student ratio, enabling a high-quality learning and teaching environment to operate in.

Student feedback suggests they find interactions between faculty members and students satisfactory.

Faculty members are readily available to students, including an open-door policy.

The process for student assessment is evaluated appropriately.

Strengths

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

Strengths for BScEE

The educational outcomes of this study program are well defined in the document Application for Evaluation – Accreditation Program of Study. For each of the courses (compulsory and elective), there is a clear specification of a) course purpose and objectives, b) learning outcomes, c) prerequisites, course content, bibliography, teaching methodology, and assessment.

Student feedback on teaching is directly received and considered by faculty members to improve course delivery and exam.

Appropriate size of department.

Good staff/student ratio.

Commitment of staff to their programmes and students.

Commitment of staff in use innovative teaching methods, including hybrid systems during the pandemic situation.

Strengths for MScEE

The educational outcomes of this study program are well defined in the document Application for Evaluation – Accreditation Program of Study. For each of the courses (compulsory and elective), there is a clear specification of a) course purpose and objectives, b) learning outcomes, c) prerequisites, course content, bibliography, teaching methodology, and assessment.

Student feedback on teaching is directly received and considered by faculty members to improve course delivery and exam.

Appropriate size of department.

Good staff/student ratio.

Commitment of staff to their programmes and students.

Commitment of staff in use innovative teaching methods, including hybrid systems during the pandemic situation.

Strengths for PhDEECEI

The educational outcomes of this study program are well defined in the document Application for Evaluation – Accreditation Program of Study. For each of the courses (compulsory and elective), there is a clear specification of a) course purpose and objectives, b) learning outcomes, c) prerequisites, course content, bibliography, teaching methodology, and assessment.

Student feedback on teaching is directly received and considered by faculty members to improve course delivery and exam.

Appropriate size of department.

Good staff/student ratio.

Commitment of staff to their programmes and students.

Commitment of staff in use innovative teaching methods, including hybrid systems during the pandemic situation.

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.

Areas of improvement and recommendations for BScEE

Not many areas of improvement were detected for this program.

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

Areas of improvement and recommendations for MScEE

Not many areas of improvement were detected for this program.

Consider fostering industrial internship opportunities available to MSc students.

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

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

Areas of improvement and recommendations for PhDEECEI

Not many areas of improvement were detected for this program.

Please see section 6.

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



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

3. Teaching staff (ESG 1.5)

Sub-areas

- 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

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.

Findings for BScEE

Findings for MScEE

Findings for PhDEECEI

The vast majority of teaching staff are TRS (Teaching and Research Staff) which are elected. In addition, they are complemented by a small number of STS (Special Teaching Staff). Their academic qualifications together with their scientific experience are highly relevant to above programs of study. Given that many of the teaching staff have acquired their first and PhD degrees from well-established universities in USA and Europe, they bring an international perspective to the study programs and ensure that high quality is attained. Teaching workload is typically 180 hours/year, and the effort of academic staff is distributed as 30% teaching, 50% research and 20% administration. The above numbers are aligned to practices widely acceptable and appropriate.

The number of teaching staff is sufficient to support the three programmes of study, though it is relatively small. Four new academic positions have been advertised and are now in the recruitment process; this will strengthen subjects that are currently under pressure. Majority of teaching staff are at the Assistant Professor rank (10) while more senior academics include 1 Associate Professor and 4 Professors. All are full-time and they are supported by a smaller number of Special Teaching Staff (STS), Special Scientists and visiting teaching staff.

The recruitment process for the TRS is very well-structured, transparent, and thorough, with clearly defined minimum requirements for each rank. The same is also true for the upgrading, continuation, or termination of employment for academic staff.

Courses and instructors are evaluated by the end of each semester through compulsory questionnaires that are completed by students. The questionnaires are returned to the teaching staff for consideration and at the same time are monitored by the Chair of Department. The evaluation scores are considered during the assessments of the faculty members for promotion.

The teaching staff frequently communicates with the Cyprus Scientific and Technical Chamber (ETEK) to ensure compliance of the offered degrees with the requirements for accreditation set by ETEK.

Strengths

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

Strengths for BScEE

Strengths for MScEE

Strengths for PhDEECEI

Teaching is supported by appropriate teaching tools such as Moodle and a friendly approach to students is followed with easy access to the instructors. This is facilitated by the relatively small number of enrolled students, which results in a reasonable workload for the academic staff and ensures adequate time for their research. Labs are well-organized with sufficient stations and very modern equipment, covering all major electrical engineering subjects.

Many of the teaching staff have acquired their degrees in well-established universities in Europe and USA, bringing a rich expertise from international academic environments.

Synergies of teaching and research are encouraged. As most academic members are very active in research projects, students are naturally exposed to the research topics that are pursued. This is more pronounced in the MSc programme with presentations of research findings in lectures, laboratory demonstration of experimental research work and direct involvement of students in research through their MSc thesis.

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.

Areas of improvement and recommendations for BScEE

Areas of improvement and recommendations for MScEE

Areas of improvement and recommendations for PhDEECEI

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

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

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

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

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

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

Findings for BScEE

The 4-year BSc in Electrical Engineering is a programme that applicants can enter either with Pancyprian exams organized by the state or through the (GCE's) International Examinations Procedure. Also candidates can apply to enter the Univeristy as transfer students from other Universities twice a year. A very small number (1 or 2) of Erasmus students enter the programme every year. It has been stated that the graduates can acquire key positions in the industry and other areas like government and education. The programme offers a variety of courses like, power generation and distribution, renewable energy, electrical installations, biomedical engineering, information technology, multimedia, photonics, nanotechnology, telecommunications, automation industry, analog and digital circuits design, etc. The advance courses are taught in the 4th year of the programme. The programme is fully funded by the government.

There were 218 graduates in the past 11 years with total number of them to keep decreasing since 2015. The programme has a good internships opportunities at the end of 3rd year.

Findings for MScEE

The 2-years conventional Master of Science in Electrical Engineering programme is a strong and wide area MSc as it enriches the knowledge of students in advanced subjects like Signal and Image Processing, Fiber Optics, Power Systems, Biomedical Engineering etc. It aims to offer the graduates the possibility to emphasize on fundamental concepts and key issues of Electrical Engineering. The MSc in EE is one out of four Masters offered by the University. The students can enrol in the MSc if they have a degree in Electrical Engineering, Computer Engineering and Informatics or other related

disciplines according to specific evaluation criteria. A well set-up procedure is in place for student admission and among other requirements is academic transcripts, a C.V and a brief personal statement.

The Master in Electrical Engineering started enrolling students in 2012. In the 4th year of the Master programme, there was a sudden 100% increase of enrolled students but since then there was a continuous decrease where the last two years no students enrolled the programme. Currently there is only one active student. Out of the total 31 students that graduated only 7 graduated with the thesis selection option. Another figure that is stated is that the dropout rate is about 25% of enrolled students. The reasons given for that is that students cannot cope with studying while working at the same time.

Findings for PhDEECEI

The PhD in Electrical Engineering, Computer Engineering and Informatics is a 4-year full time programme. The mission of the PhD program is to train future academic and industrial leaders in conducting cutting-edge research in the fields of Electrical Engineering, Computer Engineering and Informatics, create graduates with deep knowledge and understanding in specific areas of the field, who have acquired advanced analytical and complex problem-solving skills, and who will be able to recognize open problems and needs in their field, generate new knowledge, and provide efficient solutions to practical problems. The first PhD graduate in 2015 and the total number of PhD graduated to date is 21 where 16 of them after graduation worked as academics and 5 as non-academics. It is also worth noting that only 5 out of 25 total active PhD students are female. The candidates can enrol the programme through a clear procedure with requirements of a C.V. of minimum GPA 6.5/10 for the first degree, a brief candidate's Personal Statement of goals and research interests and recommendation letters.

The evaluation committee is stating the very good progress monitoring of candidates and the great quality assurance mechanisms that are in place.

Strengths

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

Strengths for BScEE

Graduates of the Electrical Engineering Bachelor Degree develop all necessary professional skills required to cope with the fast-evolving technological environment and be employed into a very wide area and diverse sectors of the engineering sector. Also the programmes's graduates are very competitive for enrollment in Master programmes in Europe and USA.

Strengths for MScEE

A strong point of the Master is concerned with the employment prospects for graduates. On the other hand, a weak point is the very low number of enrolled students the past few years with the last two to face the fact that no students enrolled the programme.

The evaluation committee during the interviews with students, noticed the strong connection they have with the Master they study. They were all very satisfied with the modules and the knowledge they get as well as with the relationship with academic staff.

Strengths for PhDEECEI



The PhD programme in Electrical Engineering, Computer Engineering and Informatics is an excellent programme with a balanced mixture of courses and emphasis on high quality research. The employability is very high in leadership positions.

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.

Areas of improvement and recommendations for BScEE

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

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

Areas of improvement and recommendations for MScEE

The evaluation committee thinks that an area of improvement of the Master is concerned with the number of enrolled students.

Another area of improvement is concerned with the percentage of students who withdrew, and the urgent need for a structured process to monitor and improve this.

The evaluation committee suggests that the Department tries to attract local students while being more active in advertising the outcomes and benefits of Master programme. Another suggestion is to visit public sector and industries in Cyprus promoting further education to employees. Another suggestion is to have a mixed programme with physical and remote participation in an effort to keep in the Master programme the students that withdraw. Furthermore, teaching the programme in English can attract foreign students from abroad.

Areas of improvement and recommendations for PhDEECEI

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

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



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

Findings for BScEE

Findings for MScEE

Findings for PhDEECEI

During the virtual tour through the Department, observing the resources and facilities, and asking questions from the members of academic and administrative staff and students, the overall perception is that the Department has adequate resources and infrastructure to meet the present requirements. The department is effective and professional in its learning and teaching activities. The teaching rooms are suitable for theoretical, practical and laboratory lessons. The special teaching staff and special scientists have the required qualifications, sufficient professional experience, and expertise to teach a limited number of programmes of study. As evident by their CVs, the scientific merits of the staff are of high standards. Physical resources and support services to the student are adequate.

Strengths

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

Strengths for BScEE

Strengths for MScEE

Strengths for PhDEECEI

The programmes have a very good structure and support. Administrative staff is well organized and provides high quality support. The Department is well managed, and resources are adequately used to provide excellent quality of services and outputs. The academic faculty is a united and cohesive group working together to advance the quality of research and teaching in the department. The small size of the department allows for effective informal solutions to operations issues. Students are highly satisfied with the quality of learning and teaching resources although they feel that they need more practical courses. Staff expertise and relevance to the program of study and department. A key strength in the department's learning and teaching activities is the academic support given to students throughout their studies.

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.

Areas of improvement and recommendations for BScEE

Areas of improvement and recommendations for MScEE

Areas of improvement and recommendations for PhDEECEI

It is highly recommended to ensure the continuous funding of the infrastructure that supports the programme. This includes lab infrastructure and relevant to the programme software. It seems that the University does not have sufficient financial resources to guarantee this.

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

The allocated resources for funding the infrastructure and for the operation of the department and the continuous improvement of the quality of its programmes of study need to be re-evaluated.

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

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

Appropriate plans are in place for this programme, including all aspects of selection criteria and requirements, proposal and dissertation, and supervision and committees.

Strengths

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

Expertise of staff

Good supervisor/student ratio

Formally, the procedure for evaluating the PhD candidates appears solid and well regulated. There is also an external component of professors.

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 programme could support more international and external periods of research to broaden the scope and context of the students' research studies. Probably, an increase in external collaboration



with professors from other universities both from Cyprus as well as from abroad, will increase the visibility of the programme, also by involving private companies in the field of Electrical Engineering. This might very likely lead to joint publications.

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

Sub-areas		<i>Non-compliant/ Partially Compliant/Compliant</i>
6.1	Selection criteria and requirements	Compliant
6.2	Proposal and dissertation	Compliant
6.3	Supervision and committees	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 each programme of study under review may be achieved, with emphasis on the correspondence with the EQF.

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



E. Signatures of the EEC

<i>Name</i>	<i>Signature</i>
Michael A. E. Andersen	
Zhiguo Ding	
Emmanouil Kriezis	
Christos Charalambous	
Phivos Hatzilarkou	
FullName	

Date: October 20th 2021

