



ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION



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Date: Date

External Evaluation Report (Departmental)

- **Higher Education Institution:**
Cyprus University of Technology
- **Town:** Limassol
- **School/Faculty:** Geotechnical Sciences and Environmental Management
- **Department:** Chemical Engineering
- **Department's Status:** Currently Operating

- **Programme(s) of study under evaluation:**
Name (Duration, ECTS, Cycle)

Programme 1

In Greek:

Προπτυχιακό Πρόγραμμα στη Χημική Μηχανική (4 έτη, 240 ECTS)

In English:

Undergraduate Programme in Chemical Engineering (4 years, 240 ECTS)

Programme 2

In Greek:

Διδακτορικό Πρόγραμμα στη Χημική Μηχανική και Περιβαλλοντική Τεχνολογία (3 έτη, 240 ECTS)

In English:

PhD Programme in Chemical Engineering and Environmental Technology (3 years, 240 ECTS)

Programme 3

In Greek:

Programme Name

In English:

Programme Name



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].



Department's programmes (to be filled by the CYQAA officer and verified by the EEC):

DEPARTMENT	PROGRAMMES OF STUDY
Chemical Engineering	Undergraduate Programme in Chemical Engineering (4 years, 240 ECTS)
	PhD Programme in Chemical Engineering and Environmental Technology (3 years, 240 ECTS)

A. Introduction

This part includes basic information regarding the onsite visit.

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The members of the External Evaluation Committee (EEC) visited the Cyprus University of Technology (CUT) physically during May 18 - May 20, 2023. The meeting with the members of the university took place at CUT in Limassol on May 18 and featured an introduction of the members of the external evaluation committee, a very brief meeting with the Rector of CUT (due to other obligations) and a meeting with the members of the Internal Evaluation Committee.

Accordingly, separate meetings took place (a) with the Head of the department and the coordinator of the Undergraduate and PhD programs (b) the academic and teaching staff (c) the administrative staff and (d) student representatives. During these meetings, the EEC members had the opportunity to have a thorough review of the Undergraduate and PhD Program as well as of the status and operation of the Department.

More specifically, the following meetings took place:

(a) A meeting with the Head of the department and the coordinator of the Undergraduate and PhD programs, where detailed presentations were given on the Department's mission statement and operation, and on the two programs under evaluation. The department head and the coordinator of the two programs along with a few members of the teaching staff responded successfully to the questions raised by the EEC members, while fruitful discussions took place on several aspects regarding the operation and vision of the Department.

(b) A meeting with academic and teaching staff members, in which the discussion focused on teaching, research and administrative aspects of all courses as well as on the overall operation of the Department. Faculty and teaching staff members gave extensive and detailed presentations showing enthusiasm regarding their work at CUT and were eager to answer questions asked by the EEC members and provide any additional data and complimentary information required.

(c) A meeting with administrative staff members where detailed and sufficient information has been provided to the ECC members while the administrative staff members explained in detail the different administration practices in the department.

(d) A meeting with 15 students, both under- and postgraduate students, followed, discussing very openly their perspective and experience of their studies and of their life as CUT students.



Later in the afternoon, a physical tour took place, visiting the Department's teaching and research facilities including laboratories and, where the EEC members learnt about several research case-studies by both professors and PhD students.

Finally, a wrap-up discussion was held with the Head of the Department and the Undergraduate's Program Coordinator, to clarify questions that came up during the day.

B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
Efstathios Kikkinidis	Professor	Aristotle University of Thessaloniki
Jens Abildskov	Associate Professor	Technical University of Denmark
Waheed Afzal	Senior Lecturer (Associate Professor)	University of Aberdeen
Michalis Chrysaphis	Professional Chemical Engineer	Scientific and Technical Chamber of Cyprus Representative-ETEK
Marios Alkiviades	Post graduate Student	University of Cyprus
Name	Position	University

C. Guidelines on content and structure of the report

- *The external evaluation report refers to the Department as a whole (programmes offered, teaching staff, administrative staff, infrastructure, resources, etc.).*
- *The external evaluation report follows the structure of assessment areas and sub-areas.*
- *Under each assessment area there are quality indicators (criteria) to be scored by the EEC on a scale from one (1) to five (5), based on the degree of compliance for the above mentioned quality indicators (criteria). The scale used is explained below:*

1 or 2:	Non-compliant
3:	Partially compliant
4 or 5:	Compliant

- *The EEC must justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.*
- *It is pointed out that, in the case of indicators (criteria) that cannot be applied due to the status of the Department, N/A (= Not Applicable) should be noted and a detailed explanation should be provided on the Department's corresponding policy regarding the specific quality indicator.*
- *In addition, for each assessment area, it is important to provide information regarding the compliance with the requirements. In particular, the following must be included:*

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - 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 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.***
- *The report may also address other issues which the EEC finds relevant.*

1. Department's academic profile and orientation

(ESG 1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9)

Sub-areas

- 1.1 Mission and strategic planning (including SWOT analysis)
- 1.2 Connecting with society
- 1.3 Development processes

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: Non-compliant

3: Partially compliant

4 or 5: Compliant

Quality indicators/criteria		
1. Department's academic profile and orientation		
1.1 Mission and strategic planning (including SWOT analysis)		1 - 5
1.1.1	The Department has formally adopted a mission statement, which is available to the public and easily accessible.	5
1.1.2	The Department has developed its strategic planning aiming at fulfilling its mission.	5
1.1.3	The Department's strategic planning includes short, medium-term and long-term goals and objectives, which are periodically revised and adapted.	4
1.1.4	The programmes of study offered by the Department reflect its academic profile and are aligned with the European and international practice.	5
1.1.5	The academic community is involved in shaping and monitoring the implementation of the Department's development strategies.	5
1.1.6	Stakeholders such as academics, students, graduates and other professional and scientific associations participate in the Department's development strategy.	5
1.1.7	The mechanism for collecting and analysing data and indicators needed to effectively design the Department's academic development is adequate and effective.	4
Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.		

The Department of Chemical Engineering at CUT is a newly established department that transitioned from an existing department of environmental sciences; it has developed chemical engineering programmes in recent past. Since there has not been enough time to review and continuously improve their original academic design yet, we propose to thoroughly explore mechanisms for obtaining and utilizing data in this area in due course. They will benefit from incorporating feedback from various stakeholders such as students, fresh graduates, employers, and alumni to gain valuable insights and make informed decisions.

Student Feedback:

Create online surveys and suggestion boxes for students to provide input on their academic experience. Organize regular focus group discussions or town hall meetings for open communication.

Fresh Graduate Surveys:

Develop post-graduation surveys to gather insights on program effectiveness and industry readiness. Conduct interviews with recent graduates to gather specific recommendations.

Employer Feedback:

Establish partnerships with hiring companies and conduct employer satisfaction surveys.

Alumni Involvement:

Collaborate and develop its alumni association and professional network to gather feedback on long-term career success and industry trends. Similar bodies may be useful for endowments and donations.

Additionally, provide information on the following:

1. Coherence and compatibility among programmes of study offered by the Department.

Both programs offered by the department are well-aligned. The department plans to offer an MSc program within chemical engineering in the future.

2. Coherence and compatibility among Departments within the School/Faculty (to which the Department under evaluation belongs).

There is coherence and collaboration with other departments for research, for example having and/or providing access to equipment for research students.

Provide suggestions for changes in case of incompatibility.

Click to enter text.

1. Department's academic profile and orientation

1.2 Connecting with society

1 - 5

1.2.1

The Department has effective mechanisms to assess the needs and demands of society and takes them into account in its various activities.

4

1.2.2	The Department provides sufficient information to the public about its activities and offered programmes of study.	5
1.2.3	The Department ensures that its operation and activities have a positive impact on society.	5
1.2.4	The Department has an effective communication mechanism with its graduates.	4

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The Department could develop a common strategic plan with the key municipalities and communal councils of Limassol (and other major cities of Cyprus) to identify and prepare common goals for sustainable development (1.2.1).

The department has a legacy (from its predecessor department of environmental sciences) in working on research problems related to water quality and wastewater treatment. This is also justified by their participation in LIFE and INTERREG programs (1.2.1).

Since the department and its programmes are quite new, so it has not produced enough graduates to establish the most effective review, improvements and communication mechanisms (1.2.4).

1. Department's academic profile and orientation

1.3 Development processes

1 - 5

1.3.1	Effective procedures and measures are in place to attract and select teaching staff to ensure that they possess the formal and substantive skills to teach, carry out research and effectively carry out their work.	5
1.3.2	Planning teaching staff recruitment and their professional development is in line with the Department's academic development plan.	5
1.3.3	The Department applies an effective strategy of attracting high-level students from Cyprus and abroad.	4
1.3.4	The funding processes for the operation of the Department and the continuous improvement of the quality of its programmes of study are adequate and transparent.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The institution follows a legal framework for staff recruitment with limited flexibility. Despite this, the academic staff's quality and diverse backgrounds demonstrate its effectiveness (1.3.1). Undergraduate enrolment is restricted to national exams in Cyprus. Attracting international students is challenging since Greek medium of instruction and assessment. Efforts to recruit exceptional students is possible in the PhD programmes due to no strict requirement of Greek language (1.3.3). Collaboration with European

universities aims to transform CUT into the European engineering university. The Department's strategy includes recruitments of four new staff members (1.3.4). Funding depends on the University's budget set by the Ministry of Education with a limiting number of options for the university administration.

Additionally:

- Expected number of Cypriot and international students: B.Sc.: 15-25 per year.
- Countries of origin of international students and number from each country (Greece)

Click to enter text.

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The department has successfully transitioned into a proper Chemical Engineering department, being the first and only department of its kind in Cyprus. The department has successfully demonstrated that it provides very successful BSc and PhD programs. Since these programs are relatively new, we believe that the systems and procedures of the university will result in improvements in due course.

Strengths

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

The institution has made significant strides in establishing the first and only department of chemical engineering, offering undergraduate and doctoral programs. This commendable endeavor is not only successful but also demonstrates a promising trajectory for growth and development.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

In order to prepare a strategic plan for the sustainable aspects of the urban, rural and local environments the department could ask the department students to prepare a related stakeholder mapping for the Limassol region and decide on the tools to engage with the stakeholders and their groups (CUT academic society, local communities, unemployed persons, biodiversity stakeholders, NGOs, Startups, etc). In that way students will be familiar with the sustainability indicators (financial, social and environmental) that are useful for their city and be competent on preparing social and environmental impact assessment.

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

Sub-area	<i>Non-compliant / Partially Compliant / Compliant</i>
1.1 Mission and strategic planning	Compliant
1.2 Connecting with society	Compliant
1.3 Development processes	Compliant

2. Quality Assurance

(ESG 1.1, 1.2, 1.3, 1.4, 1.6, 1.7, 1.8)

Sub-areas

- 2.1 System and quality assurance strategy
- 2.2 Quality assurance for the programmes of study

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

- 1 or 2: *Non-compliant*
- 3: *Partially compliant*
- 4 or 5: *Compliant*

Quality indicators/criteria		
2. Quality Assurance		
2.1 System and quality assurance strategy		1 - 5
2.1.1	The Department has a policy for quality assurance that is made public and forms part of the Institution's strategic management.	5
2.1.2	Internal stakeholders develop and implement a policy for quality assurance through appropriate structures and processes, while involving external stakeholders.	5
2.1.3	The Department's policy for quality assurance supports guarding against intolerance of any kind or discrimination against students or staff.	5
2.1.4	The quality assurance system adequately covers all the functions and sectors of the Department's activities:	
2.1.4.1	Teaching and learning	4
2.1.4.2	Research	5
2.1.4.3	The connection with society	4
2.1.4.4	Management and support services	5
2.1.5	The quality assurance system promotes a culture of quality.	4
2.1.6	Students' evaluation and feedback	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The course descriptions can benefit from a program level top-down review to minimize repetitions of contents among different courses and accommodate more useful and relevant topics such as application of computers, programming and industrially- useful software tools, computer-aided design, artificial development and machine learning, engineering thermodynamics, sustainability, safety and ethics throughout the program from the first to last years (2.1.4). The Department can benefit from promoting to its staff and students the four steps of quality culture i.e. on using plan-do-check-act (PDCA cycle) for lifelong improvements (2.1.5).

2. Quality Assurance

2.2 Quality assurance for the programmes of study

1 - 5

2.2.1	The responsibility for decision-making and monitoring the implementation of the programmes of study offered by the Department lies with the teaching staff.	5
2.2.2	The system and criteria for assessing students' performance in the subjects of the programmes of studies offered by the Department are clear, sufficient and known to the students.	5
2.2.3	The quality control system refers to specific indicators and is effective, which have been presented and discussed.	5
2.2.4	The results from student assessments are used to improve the programmes of study.	5
2.2.5	The policy dealing with plagiarism committed by students as well as mechanisms for identifying and preventing it are effective.	5
2.2.6	The established procedures for examining students' objections/ disagreements on issues of student evaluation or academic ethics are effective.	5
2.2.7	The Department publishes information related to the programmes of study, credit units, learning outcomes, methodology, student admission criteria, completion of studies, facilities, number of teaching staff and the expertise of teaching staff.	5
2.2.8	Names and position of the teaching staff of each programme are published and easily accessible.	5
2.2.9	The Department has a clear and consistent policy on the admission criteria for students in the various programmes of studies offered.	5
2.2.10	The Department flexibly uses a variety of teaching methods.	5

2.2.11	The Department systematically collects data in relation to the academic performance of students, implements procedures for evaluating such data and has a relevant policy in place.	5
2.2.12	The Department analyses and publishes graduate employment information.	4
2.2.13	The Department ensures adequate and appropriate learning resources in line with European and international standards and/or international practices, particularly:	
2.2.13.1	Building facilities	4
2.2.13.2	Library	5
2.2.13.3	Rooms for theoretical, practical and laboratory lessons	4
2.2.13.4	Technological infrastructure	5
2.2.13.5	Academic support	5
2.2.14	There is a student welfare service that supports students in regard to academic, personal problems and difficulties.	5
2.2.15	The Department's mechanisms, processes and infrastructure consider the needs of a diverse student population such as mature, part-time, employed and international students as well as students with disabilities.	4
2.2.16	Mentoring of each student is provided and the number of students per each permanent teaching member is adequate.	5
2.2.17	The provision of quality doctoral studies is ensured through doctoral studies regulations, which are publicly available.	5
2.2.18	The number of doctoral students, under the supervision of a member of the teaching staff, enables continuous and effective feedback to the students and it complies with the European and international standards.	5
2.2.19	The Department has mechanisms and funds to support writing and attending conferences of doctoral candidates.	5
2.2.20	There is a clear policy on authorship and intellectual property.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The quality control and assurance procedures are highly rated by the evaluation committee. There is limited student diversity due to programs being entirely run in Greek, hindering non-Greek speaking students to participate. Sufficient and well-equipped building facilities but lacking a unified campus with modern and accessible amenities, perhaps, impacting students with disabilities (2.2.15).

The programs can benefit from more hands-on exposure of chemical processes at a larger scale (pilot or industrial scale) by adopting collaborations with industrial partners to enhance practical application and real-world relevance. Ongoing efforts to establish internship programs for students to gain hands-on industry experience can, perhaps be expanded in terms of time and emphasis.

Click to enter text.

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The EEC is satisfied with the university and departmental frameworks for quality assurance, including program design, delivery, assessment, and student feedback, as well as program reviews.

Strengths

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

The department fosters a close-knit learning community due to small cohorts of students in BSc and PhD programs, promoting strong relationships among staff members and students.

Academic staff members are highly motivated to develop and improve the department in the long run.

The department administration demonstrates awareness of issues and provides effective leadership when needed.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

Incorporate feedback from students, industry professionals, and external subject experts into periodic course and program reviews (annually or bi-annually) to ensure continuous improvement of curriculum content, delivery, and assessment.

Integrate emerging topics such as sustainability, ethics, artificial intelligence, machine learning, and computer-aided design into relevant courses, while eliminating unnecessary repetitions through regular course updates.

Foster a culture of quality, safety, and sustainability within the department by setting a positive example, providing training opportunities, and recognizing and rewarding good practices in teaching and learning.

Facilitate the sharing of effective teaching practices through formal and informal forums, such as staff teaching networks.

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

Sub-area	<i>Non-compliant / Partially Compliant / Compliant</i>
2.1 System and quality assurance strategy	Compliant



2.2 Quality assurance for the programmes of study	Compliant
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3. Administration (ESG 1.1, 1.3, 1.6)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: Non-compliant
3: Partially compliant
4 or 5: Compliant

Quality indicators/criteria		
3. Administration		1 - 5
3.1	The administrative structure is in line with the legislation and the Department's mission.	5
3.2	The members of the teaching and administrative staff and the students participate, at a satisfactory degree and on the basis of specified procedures, in the management of the Department.	5
3.3	The administrative staff adequately supports the operation of the Department.	5
3.4	Adequate allocation of competences and responsibilities is ensured so that in academic matters, decisions are made by academics and the Department's council competently exercises legal control over such decisions.	5
3.5	The Department applies effective procedures to ensure transparency in the decision-making process.	5
3.6	Statutory sessions of the Department are held and minutes are kept.	5
3.7	The Department's council operates systematically and autonomously and exercise the full powers provided for by the law and / or the constitution of the Department without the intervention or involvement of a body or person outside the law provisions.	5
3.8	The manner in which the Department's council operates and the procedures for disseminating and implementing their decisions are clearly formulated and implemented precisely and effectively.	5
3.9	The Department applies procedures for the prevention and disciplinary control of academic misconduct of students, teaching and administrative staff, including plagiarism.	5
3.10	The Department has appropriate procedures for dealing with students' complaints.	5

3.11	Internationalization of the Department and external collaborations.	4
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Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

While the staff and students benefits from a few EU wide exchanges, the internationalization agenda of the Department can be enhanced by introducing more courses taught in English (3.11).

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The EEC is pleased with the administrative policies, structure, and procedures of the university and department, which effectively supports teaching, learning, and research.

As a relatively new and progressive university, the EEC members are impressed by the institution's mission, vision, and commitment to staff, students, and society.

Strengths

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

The department has a well-defined administrative structure, from the department head to course instructors, ensuring clear roles and responsibilities.

Student support is provided by the university's central body, particularly catering to the needs of students with special requirements.

Due to the small groups of BSc and PhD students and a moderate-sized staff, direct contact between students and staff members facilitates effective student support.

The adoption of e-learning platforms and the depositing of research output in the local depository are commendable institutional practices.

The department's work on environmental remediation for industry and government is highly appreciated.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

The department heavily relies on the university's administrative support, with only one administrative support staff member at the department. Limited technical staff, with only one technician supporting several labs, may impact the department's operations and future ambitions.

Expanding safety provisions, especially in relation to venting systems, the provision of personal protective equipment, and safety training, would benefit the department and ensure a safer working environment.



Please select what is appropriate for the following assessment area:

Assessment area	<i>Non-compliant / Partially Compliant / Compliant</i>
3. Administration	Compliant

4. Learning and Teaching (ESG 1.2, 1.3, 1.4, 1.9)

Sub-areas

- 4.1 Planning the programmes of study
- 4.2 Organisation of teaching

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

- 1 or 2: *Non-compliant*
- 3: *Partially compliant*
- 4 or 5: *Compliant*

Quality indicators/criteria		
4. Learning and Teaching		
4.1 Planning the programmes of study		1 - 5
4.1.1	The Department provides an effective system for designing, approving, monitoring and periodically reviewing the programmes of study.	4
4.1.2	Students and other stakeholders, including employers, are actively involved on the programmes' review and development.	4
4.1.3	Intended learning outcomes, the content of the programmes of study, the assignments and the final exams correspond to the appropriate level as indicated by the European Qualifications Framework (EQF).	5
4.1.4	The programmes of study are in compliance with the existing legislation and meet the professional qualifications requirements in the professional courses, where applicable.	4
4.1.5	The Department ensures that its programmes of study integrate effectively theory and practice.	4

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The cycle of design/review is not complete yet due to the recent transition of the department (4.1.1). The department, being relatively new, can benefit from enhancing stakeholder engagement in the academic review process over time (4.1.2).

The programs of study follow all requirements in the professional courses, however they can benefit by enhancing the elements of teaching and learning in Chemical Engineering Design, Safety, Sustainability, and Ethics, and Teamwork (4.1.4).

The theory and practice could be enhanced by adding more local content in the content taught. Regarding health and safety in each course it would be useful to expand it to HSSE (Health, Safety, Security and Environment) so that students learn how to do risk assessment, personal protection material etc.) (4.1.5).

In enhancing of practical skills and prepare young graduates to become good practitioners, the Department may include a presentation by CYS (Cyprus Standardization Company) to be familiar with the International Systems and Standards.

4. Learning and Teaching

4.2 Organisation of teaching

1 - 5

4.2.1	The Department establishes student admission criteria for each programme, which are adhered to consistently.	5
4.2.2	Recognition of prior studies and credit transfer is regulated by procedures and regulations that are in line with European standards and/or international practices.	5
4.2.3	The number of students in the teaching rooms is suitable for theoretical, practical and laboratory lessons.	5
4.2.4	The teaching staff of the Department has regular and effective communication with their students, promoting mutual respect within the learner-teacher relationship.	5
4.2.5	Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process.	5
4.2.6	The teaching staff of the Department provides timely and effective feedback to their students.	5
4.2.7	The criteria and the method of assessment as well as the criteria for marking are published in advance.	5
4.2.8	The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

Click to enter text.

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

Based on the Department's application and the site-visit it is concluded that the the department is compliant in all categories of teaching and learning.

Strengths

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

The teaching staff consists of a group of young and enthusiastic people that are passionate with their work both in teaching and research. The small number of students/year allows the creation of stronger links among students and teaching staff leading to better learning outcomes and handling of individual difficulties.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

It is advised to integrate students better. There seems not to be much consciousness among students about representation and how to exert influence on programs.

On the teaching part, it is recommended to develop access to practical experiences with larger scale processing equipment. Internships may help with this, but then internships must not reduce to analytical work only. Furthermore it is recommended to make the students familiar with computational tools throughout their course-work.

It would be good to organize an Annual Career Day for Chemical Engineer Students were students could learn more about:

- a) The Legislation that relates to Chemical Engineering profession and especially how to apply for a professional licence to ETEK (Scientific and Technical Chamber)
- b) The modern working environments of Chemical Engineering (industrial, process, teaching, laboratory, research, consulting, energy, food, environment, climate, bioengineering, sustainability)
- c) The major Cyprus industries and their products /services
- d) The adaptation of Chemical Engineering to flexible work and flexible teams (online, in-place, remote).
- e) The Industrial Policy of Cyprus and the key role of Chemical Engineering in onshore and offshore environment.
- f) The design and production of Sustainable Chemical Engineering Products and Services
- g) The standardisation and certification of Chemical Engineering Services and the key role in the innovation agenda of Cyprus

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

Sub-area	<i>Non-compliant / Partially Compliant / Compliant</i>
4.1 Planning the programmes of study	Compliant
4.2 Organisation of teaching	Compliant

5. Teaching Staff (ESG 1.5)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

- 1 or 2: *Non-compliant*
3: *Partially compliant*
4 or 5: *Compliant*

Quality indicators/criteria		
5. Teaching Staff		1 - 5
5.1	The number of teaching staff - full-time and exclusive work - and the subject area of the staff sufficiently support the programmes of study.	4
5.2	The teaching staff of the Department has the relevant formal and substantive qualifications for teaching the individual subjects as described in the relevant legislation.	5
5.3	The visiting Professors' subject areas adequately support the Department's programmes of study.	5
5.4	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.	5
5.5	The ratio of special teaching staff to the total number of teaching staff is satisfactory.	4
5.6	The ratio of the number of subjects of the programme of study taught by teaching staff working fulltime and exclusively to the number of subjects taught by part-time teaching staff ensures the quality of the programme of study.	4
5.7	The ratio of the number of students to the total number of teaching staff is sufficient to support and ensure the quality of the programme of study.	5
5.8	Feedback processes for teaching staff in regard to the evaluation of their teaching work, by the students, are satisfactory.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

There is a recognized need for expanding the staff with core chemical engineering background - advertisements are underway (5.1).

The reliance on the special teaching staff should be gradually shifted to the permanent teaching staff at assistant professor or higher levels. The special teaching staff should be provided better career path into becoming assistant professor (and higher) (5.5-5.6).

Also, write the following:

- Number of teaching staff working full-time and having exclusive work: 10

- Number of special teaching staff working full-time and having exclusive work: 4
- Number of visiting Professors: 0
- Number of special scientists on lease services: 15

Click to enter text.

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

A university with a strong turnout of staff, eager to participate in discussions and aspects of quality assurance.

Strengths

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

Very enthusiastic and dedicated staff, with a sound average age.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

Need more staff with core-chemical engineering as part of their basic training. As mentioned, this is recognized by the department, and appropriate steps are planned.

We believe a higher ratio of permanent staff is desired (5.5 + 5.6). It would be good to provide faster career tracks for the special teaching staff (< 8 years) towards achieving permanent status.

Encouragement of lecturers interested in developing teaching capabilities is important.

Please ✓ what is appropriate for the following assessment area:

Assessment area	<i>Non-compliant / Partially Compliant / Compliant</i>
Teaching staff number, adequacy and suitability	Compliant
Teaching staff recruitment and development	Compliant
Synergies of teaching and research	Compliant

6. Research

(ESG 1.1, 1.3, 1.5, 1.6)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*
3: *Partially compliant*
4 or 5: *Compliant*

Quality indicators/criteria		
6. Research		1 - 5
6.1	The Department has a research policy formulated in line with its mission.	5
6.2	The Department consistently applies internal regulations and procedures of research activity, which promote the set out research policy and ensure compliance with the regulations of research projects financing programmes.	5
6.3	The Department provides adequate facilities and equipment to cover the staff and students' research activities.	4
6.4	The Department has the appropriate mechanisms for the development of students' research skills.	5
6.5	The results of the teaching staff research activity are published to a satisfactory extent in international journals which work with critics, international conferences, conference proceedings, publications, etc. The Department also uses an open access policy for publications, which is consistent with the corresponding national and European policy.	5
6.6	The Department ensures that research results are integrated into teaching and, to the extent applicable, promotes and implements a policy of transferring know-how to society and the production sector.	5
6.7	The Department provides mechanisms which ensure compliance with international rules of research ethics, both in relation to research activity and the rights of researchers.	5
6.8	The external, non-governmental, funding of research activities of teaching staff is similar to other Departments in Cyprus and abroad.	5
6.9	The policy, indirect or direct of internal funding of the research activities of the teaching staff is satisfactory, based on European and international practices.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The department would benefit from more space dedicated to research (and teaching) equipment. Donations from alumni or other sources can be encouraged (6.3). One of the major priorities of the library was to design and develop the first Institutional Repository in Cyprus, named 'KTISIS' (<http://ktisis.cut.ac.cy/>). KTISIS is an open access digital repository that collects all digital content related to the various activities of the CUT (6.4).

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The academic staff of the Department is very active in research. Its performance, research output and external funding are among the highest in the University. Internal funding (i.e. from the University budget) of research activities is satisfactory for small research expenses, but could be improved by allocating a part of the University budget to competitive internal funding for doctoral and postdoctoral researchers.

Strengths

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

The department has reached an impressive level, research wise. Several international projects have been funded.

The library has designed and developed the first Institutional Repository in Cyprus, named 'KTISIS', which is an open access digital repository that collects all digital content related to the various activities of the CUT.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

As recognized by the department (in the application), there are several expenses associated with owning equipment. Financial resources for purchasing and operating equipment needs to be considered over the full life cycle of given equipment.

Please ✓ what is appropriate for the following assessment area:

Assessment area	<i>Non-compliant / Partially Compliant / Compliant</i>
Research mechanisms and regulations	Compliant
External and internal funding	Compliant
Motives for research	Compliant
Publications	Compliant

7. Resources (ESG 1.6)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

- 1 or 2: *Non-compliant*
3: *Partially compliant*
4 or 5: *Compliant*

Quality indicators/criteria		
7. Resources		1 - 5
7.1	The Department has sufficient financial resources to support its functions, managed by the Institutional and Departmental bodies.	4
7.2	The Department follows sound and efficient management of the available financial resources in order to develop academically and research wise.	5
7.3	The Department's profits and donations are used for its development and for the benefit of the university community.	4
7.4	The Department's budget is appropriate for its mission and adequate for the implementation of strategic planning.	5
7.5	The Department carries out an assessment of the risks and sustainability of the programmes of study and adequately provides feedback on their operation.	5
7.6	The Department's external audit and the transparent management of its finances are ensured.	5
7.7	The fitness-for-purpose of support facilities and services is periodically reviewed.	4

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

There is a need for the additional recruitment of permanent technical staff for laboratories (7.1).

We are not aware of any donations received. Nevertheless, there exists a mechanism to utilize profits and donations if they exist (7.3).

There are elements of periodic reviews of facilities within the laboratories to check electrical safety, etc. However, we could not assess this aspect any further (7.7).

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

We found a department that still has a significant support from the central university giving support for administration of studies, financial project control and legal matters.

Strengths

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

The university seems to have benefitted substantially from being a young organization, such as its implementation of E-signatures.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

Nothing critical detected at this stage.

Please ✓ what is appropriate for the following assessment area:

Assessment area	<i>Non-compliant / Partially Compliant / Compliant</i>
7. Resources	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 Department under review may be achieved.

The EEC members have found the Department of Chemical Engineering to be compliant in all the examined categories. Furthermore, the EEC members were convinced and satisfied with the practices followed by the department, given the fact that the department has recently transitioned into the field of Chemical Engineering.

The department has successfully transitioned into a Chemical Engineering Department with a clear mission and strategy that provides successful BSc and PhD programs. Since these programs are relatively new, the EEC members believe that the systems and procedures of the university will result in improvements in due course.

The EEC members are satisfied with the university and departmental frameworks for quality assurance, including program design, delivery, assessment, and student feedback, as well as program reviews. The department fosters a close-knit learning community, promoting strong relationships among staff members and students. Academic staff members are highly motivated to develop and improve the department in the long run. The department administration demonstrates awareness of issues and provides effective leadership when needed. Areas of improvement would be the incorporation of feedback from students, industry professionals, and external subject experts into periodic course and program reviews to ensure continuous improvement of curriculum content. Additional actions may include the integration of emerging topics such as sustainability, ethics, artificial intelligence, machine learning, and computer-aided design into relevant courses, while eliminating unnecessary repetitions through regular course updates.

The EEC members are pleased with the administrative policies, structure, and procedures of the university and department, which effectively supports teaching, learning, and research. As a relatively new and progressive university, the EEC members are impressed by the institution's vision, and commitment to staff, students, and society. The department has a well-defined administrative structure, from the department head to course instructors, ensuring clear roles and responsibilities. Student support is provided by the university's central body, particularly serving the needs of students with special requirements. Due to the small groups of BSc and PhD students and a moderate-sized staff, direct contact between students and staff members facilitates effective student support. The adoption of e-learning platforms and the depositing of research output in the local depository are commendable institutional practices. The department's work on environmental remediation for industry and government is highly appreciated. The department heavily relies on the university's administrative support, with only one administrative support staff member at the department. Limited technical staff, with only one technician supporting several labs, may impact the department's operations and future ambitions. Expanding safety provisions, especially in relation to venting systems, the provision of personal protective equipment, and safety training, would benefit the department and ensure a safer working environment.

Regarding the evaluation of the department in teaching and learning, the EEC members have concluded that the policy of the department is compliant in all categories. The members of the teaching staff are passionate about their work both in teaching and research. The small number of students per year allows the creation of stronger links among students and teaching staff leading to better learning outcomes and handling of individual difficulties. The EEC members recognize the need for the department to hire more people for teaching staff with core-chemical engineering as

part of their basic training. This is recognized by the department, and appropriate steps are planned. Furthermore, it would be good to provide faster career tracks for the special teaching staff (well below 8 years) towards achieving permanent status. On the teaching part, it is recommended to develop access to practical experiences with larger scale processing equipment. Furthermore, it is recommended to make the students familiar with computational tools throughout their course work and consider organizing an Annual Career Day for Chemical Engineer Students.

The EEC members are pleased to report that the academic staff of the Department is very active in research. Its performance, research output and external funding are among the highest in the University. The department has reached an impressive level research-wise. Several international projects have been funded. Internal funding of research activities is satisfactory for small research expenses but could be improved by allocating a part of the University budget to competitive internal funding for doctoral and postdoctoral researchers.

The library has designed and developed the first Institutional Repository in Cyprus, named 'KTISIS', which is an open access digital repository that collects all digital content related to the various activities of the CUT. As recognized by the department (in the application), there are several expenses associated with owning equipment. Financial resources for purchasing and operating equipment need to be considered over the full life cycle of given equipment.

The EEC members have recognized that the department has significant support from the central university giving support for administration of studies, financial project control and legal matters. The University seems to have benefitted substantially from being a young organization, such as its implementation of E-signatures.



ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION





Signatures of the EEC

<i>Name</i>	<i>Signature</i>
Efstathios Kikkinidis	
Jens Abildskov	
Waheed Afzal	
Michalis Chrysaphis	
Marios Alkiviades	
FullName	

Date: May 20 2023

