Response to External Evaluation Report

(Programmatic within the framework of Departmental Evaluation)

Higher Education Institution:
 Cyprus University of Technology

• Town: Limassol

• School/Faculty: Engineering and Technology

• **Department:** Mechanical Engineering and Materials Science and Engineering

Programme

In Greek:

MSc Μηχανολογική Μηχανική (3 εξάμηνα, 90 ECTS)

In English:

MSC Mechanical Engineering Language of Instruction: Greek

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

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

Summary Findings

Sub-area		Non-compliant/ Partially Compliant/Compliant
		MSc Mechanical
		Engineering
1.1	Policy for Quality Assurance	Compliant
1.2	Design, Approval, on-going monitoring and review	Compliant
1.3	Public Information	Compliant
1.4	Information Management	Partially compliant

Specific Findings and Response

Quality Assurance:

"There is a clear quality assurance procedure and also a process for the introduction and approval of changes in the programmes at a departmental level. These processes are less clearly structured at the program level".

Response: The Postgraduate Program Guide pertaining to the MSc programmes in Mechanical Engineering and Energy Systems is currently being revised in both Greek and English. All material regarding the Departmental rules and regulations, which relate to the quality assurance of the program, are being included in the updated Guide.

"There is input from students, which is mostly related to problems in specific courses. There is no systematic program-level input from external stakeholders such as industry or the ETEK."

Response: There is a Departmental decision regarding the issue of liaising with the external stakeholders, stated in the Departmental Strategic Plan 2018 (APPENDIX I). The issue is forwarded to the Industrial Liaison Committee for further Actions.

"General university practices apply with respect to measures on intolerance, integrity, fraud, etc."

Department's Response: General University rules and practices apply. In addition, the newly drafted University Code for combating Harassment and Sexual Harassment (100802_1CUT_harassment_code_ENG.pdf) will be clearly communicated to all students (undergraduate and postgraduate) and staff.

Information management:

"There is a good flow of information, considering the profile of the student population, their progress, success and drop-out rates, which is also enabled by the comparatively small number of students."

Response: We thank the Committee for their comments. We will try to maintain and improve this information flow.

"What needs to be enhanced is the feedback processing of students' satisfaction with their programmes. Also, a more structured information on career paths of graduates (for example career days once a year) would be helpful."

Response: The above issues "students' satisfaction career paths of graduates" are viewed at University level. Student satisfaction is assessed through the online platform at the Module level. It would not be remiss to note that The Senate Committee on Studies, Library and Student Life (our Department has a representative, Dr. Tasos Georgiades, in this Committee) is in the final stages of completely revamping the existing questionnaire pertaining to student satisfaction. We hope to receive useful information from these questionnaires that will help us improve the courses offered.

Career days and related events are scheduled throughout the year. The Department responds with all possible resources at the dispense of the organizing departments (availability of Staff and Laboratories, presentations, tours, etc.). We also note that the pre-Covid the University used to organize a Career Fair on a regular basis. We will liaise with Student Services to make sure that this practice is reenacted now that the pandemic seems to be tapering off. The Departmental Industrial Liaison Committee will contact and encourage past, current and potential employees as well as ETEK to this event. We note that we have a fairly good rapport with many of these stakeholders and we invite them to our annual awards Ceremony. In fact, many of them participate by bestowing awards to students based on academic performance. Thus, we will expand this working relationship and solicit their active participation in the Career Fair.

Public Information:

"The department's web site contains information on the MSc Mechanical Engineering programme's structure and requirements, learning aims, courses in each semester, qualifications awarded and admission criteria. Some more detailed information on the examination system, the pass rates and graduate employment opportunities would be helpful."

Response: The revised Postgraduate Program Guide (currently being prepared as mentioned above) will include more detailed information on the examination system, various assessment methods etc. We will also publish, on the website, various statistics as well as graduate employment rates and opportunities as they become available by Student Services.

Strengths:

"The programme is well organized and both its content and delivery correspond well to EQF. It is in accordance with its objectives and well aligned with developments in technology and society. Information on the programme and its courses is available.

Monitoring of the graduates' careers is not structured, but still effective."

Response: We thank the Committee for their comments.

Areas of improvement and recommendations:

"The programme has not been offered over the last couple of years. The Department intends to offer it again, so the main recommendation that can be made is to elaborate how it is aligned with the MSc Programme on Energy Systems, in order to avoid overlaps considering the students it aims to attract."

Response: In its last meeting, dated 14 April 2022, the Department has formally decided to offer the postgraduate program in Mechanical Engineering in English. We have asked permission from the University to offer this program starting in September 2022. This will be the first program in the School of Engineering and Technology (and the second across the University) to be offered in its entirety in English. We hope to also exploit recent developments with the European University of Technology, EUT +, to attract students form the other seven University Partners in the EUT + alliance. The overlap between the MSc program in Mechanical Engineering and its counterpart on Energy systems will be as little as possible and certainly within the guidelines of CYQAA.

2. Student-centred learning, teaching and assessment

Sub-areas

- 2.1. Process of Teaching and learning and student-centred teaching methodology
- 2.2. Practical training
- 2.3. Student assessment

Summary Findings

Sub-area		Non-compliant/ Partially Compliant/Compliant		
		MSc Mechanical		
		Engineering		
2.1	Process of Teaching and learning and student-centred	Not Applicable		
	teaching methodology			
2.2	Practical Training	Not Applicable		
2.3	Student Assessment	Not Applicable		

Specific Findings and Response

General:

"The Department offers a three academic semester MSc course in Mechanical Engineering a thesis-based or course-based option. The structure of the course is clearly laid out in detail and includes an option to take course from another CUT department or another University on approval from the Studies Committee. A detailed description is available for each course with clear aims and learning outcomes as well as the formal assessment.

No further comments can be made since the programme is not being offered."

Response: We thank the Committee for their kind comments.

In its last meeting, dated 14 April 2022, the Department has formally decided to offer the postgraduate program in Mechanical Engineering in English. We have asked permission from the University to offer this program starting in September 2022. This will be the first program in the School of Engineering and Technology (and the second across the University) to be offered in its entirety in English. We hope to also exploit recent developments with the European University of Technology, EUT +, to attract students form the other seven University Partners in the EUT + alliance.

Strengths:

"A wide range of interesting course options are offered and taught by experts at the top of their respective fields."

Response: We thank the Committee for their kind comments.

Areas of improvement and recommendations:

"No further comments can be made since the programme is not being offered."

Response: As noted above, the Department has formally decided to offer the postgraduate program in Mechanical Engineering in English. We have asked permission from the University to offer this program starting in September 2022.

3. Teaching Staff

Sub-areas

- 3.1. Teaching staff recruitment and development
- 3.2. Teaching staff number and status
- 3.3. Synergies of teaching and Research

Summary Findings

Sub-area		Non-compliant/ Partially Compliant/Compliant
		MSc Mechanical
		Engineering
3.1	Teaching staff recruitment and development	Partially compliant
3.2	Teaching staff number and status	compliant
3.3	Synergies of teaching and research	compliant

Specific Findings and Response

General:

"The academic staff is competent and the with excellent qualifications for teaching in the programme. The number of teaching staff is adequate for the curriculum of the programme as presented. The teaching staff brings many learning from active research into the course of the programme.

Given the high workload of the current staff it is recommended to consider hiring additional staff, if the programme is offered."

Response: We thank the Committee for their comments.

The Departmental Strategic Planning Committee has identified the areas of Engineering Design using novel and emerging materials, Additive Manufacturing, Robotics and Control of Mechanical and Mechatronic Systems and Thermodynamics/Energy Systems as critical in terms of the Department's growth and future development. We strongly believe that bringing in expertise in these areas will enrich both our undergraduate as well as postgraduate programs and, by consequence, make the MSc. Program in Mechanical engineering more attractive to students, both local and overseas. This sentiment is certainly echoed by our own graduates who often select Masters programs in these areas offered by European (mostly) and other overseas universities.

To this end, we have recently hired Dr. Petros Siegkas whose expertise is on engineering design and additive manufacturing and are in the last stages of recruiting another Lecturer/Assistant Professor in the area of Design and Manufacturing. Furthermore, we are roughly in the middle stages of recruiting a faculty member in the area of synthesis and growth of inorganic functional materials. Finally we note that at our last Departmental

meeting (April 14, 2022) we have decided on the recruitment of two Lecturers/Assistant Professors, one in Control of Mechanical/Industrial Systems and Processes and one in Thermodynamics/Energy Systems. The positions have been approved by the University and are expected to be announced soon.

Strengths:

"The vast majority of the academic staff is competent and regularly engaged in research that is being transferred to the course material. The staff qualifications are adequate to deliver excellent courses in the programme. Recruitment of new staff members follow all the necessary regulations for fair, transparent and clear recruitment."

Response: We thank the Committee for their comments.

Areas of improvement and recommendations:

"It is apparent that the academic staff has a strong focus on research and connecting their gained knowledge with teaching. However, there is no established programme for the development of their teaching and pedagogical skills. It is suggested to establish a 1-year pedagogical course for the development of the teaching skills of the existing and future academic staff. All academic staff should follow such course so the department can ensure that all teaching staff is up-to-date with the best teaching methods. It is also advised to balance the workload of the teaching staff with hiring more teaching assistants."

Response: We thank the Committee for their comments. The introduction of the recommended course shall be examined at the University level, by the University Committees. We are aware of such courses designed to improve teaching development and implementation of teaching portfolios and we certainly support the idea. We will relay our position to the Senate Committee on Studies, Library and Student Life so that it can get the necessary approval and funding by the University.

4. Student admission, progression, recognition and certification

Sub-areas

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

Summary Findings

Sub-area		Non-compliant/ Partially Compliant/Compliant	
		MSc Mechanical	
		Engineering	
4.1	Student admission, processes and criteria	Not applicable	
4.2	Student progression	Not applicable	
4.3	Student recognition	Not applicable	
4.4	Student certification	Not applicable	

Specific Findings and Response

General:

"No students exist in this programme, hence no findings can be made"

Response: We hope that being able to offer the programme in English will help us recruit a sufficient number of students.

Strengths:

No comments were made

Response: N/A

Areas of improvement and recommendations:

No comments were made

Response: N/A

5. Learning resources and student support

Sub-areas

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

Summary Findings

Sub-area		Non-compliant/ Partially Compliant/Compliant	
		MSc Mechanical	
		Engineering	
5.1	Teaching and Learning resources	Compliant	
5.2	Physical resources	Compliant	
5.3	Human support resources	Compliant	
5.4	Student support	Partially Compliant	

General:

"No students exist in this programme, hence the findings refer to the overall organisation of the Department's student support.

The Department is relatively newly built and the teaching rooms are all modern and well equipped. There is a range of Laboratories to support practical skills (Metallurgy workshop, Physics Laboratories and Engineering measurements). There are very good library services and staff are dedicated, working long shifts to help students. The two libraries provide study spaces though there is always demand for more working spaces by students who prefer to work there rather than municipal libraries. Electronic library services are also provided to support student and staff needs. There are several computer rooms for teaching and computer rooms for students' use at the two Libraries. There is ICT support for managing all systems running in the University and an Estate Management Services team. The Department features a well organised e-learning platform (Moodle) to support student learning. All resources are fit for purpose. Though there are tutors/mentors assigned to students formally, it is not clear whether the students actually benefit from this system in terms of getting access to pastoral support and building mentoring relationships with the academic staff. There is a single, very committed, administrator in the whole Department. There are support structures available for students with special needs and learning difficulties."

Response: We appreciate the Committee's comments.

Regarding the comment on the effectiveness of the student mentorship system we note that Academic Advisors are assigned to postgraduate students on registration although, this role is taken over by the Thesis Advisor (pertinent to students who take the Thesis option). In general, students who take the thesis option have regular meetings with their advisor and build a valuable mentoring relationship with the academic staff. We would, however, like to

improve the effectiveness of the mentoring system for the non-thesis students. As such, starting on September 2022, we will adopt a policy akin to the one followed for undergraduate students that will involve regular meetings between the (postgraduate) students and their mentors so that potential problems can be identified and resolved as quickly as possible.

Regarding the comment on the presence of only one, albeit very committed and dedicated administrator, we would like to note that the University has agreed to our request for further administrative support and is planning on providing a Senior Administrator (at the final stage of recruitment) to the School of Engineering.

Strengths:

"The Department's staff work hard to reach their ambitious goals of providing a good learning environment for their students. The university is relatively young and benefits from modern infrastructure; it is situated in a coastal town of a high standard of living. There are support structures in place mostly at University level. Tutoring hours are included in the course outlines and also posted on Moodle."

Response: We appreciate the Committee's comments.

Areas of improvement and recommendations:

Areas of improvement and recommendations for BEng Mechanical Engineering

Though pastoral support structures are in place at university level, it was not clear that the students knew about these and how to access them. Perhaps the Department could think of ways to strengthen communication about these services as well as consider whether such support can be complemented at the Departmental level to further strengthen the relationship between students and staff. In addition, the Department can form a working group with an aim to assess and evaluate how well their students are currently accessing the support they need (e.g. through devising an anonymous questionnaire for students to fill in).

Response: Comments are appreciated. The issue will be dealt at a Departmental and University level to ensure that the students are well aware of the level of support that is available to them and give them the opportunity to express their own opinions as to how to improve the overall support structure can be improved.

Conclusions and Final Remarks:

"Since this MSc course is currently not being offered it can be noted that its syllabus is well structured, serving the educational goals set.

The academic and teaching staff is of high quality and is highly motivated; the infrastructure is at a very good level and adequate for the educational and research activities.

Apart from this, the general comments apply, that refer to the Department's structure and operation."

Response: We appreciate the Committee's comments.

APPENDIX – From 2018 Strategic Planning Committee

ΣΤΡΑΤΗΓΙΚΟΙ ΠΥΛΩΝΕΣ ΠΑΝΕΠΙΣΤΗΜΙΟΥ	ΣΤΡΑΤΗΓΙΚΟΙ ΣΤΟΧΟΙ ΠΑΝΕΠΙΣΤΗΜΙΟΥ	ΣΤΟΧΟΙ ΤΜΗΜΑΤΟΣ ΓΙΑ ΤΟ 2018	ΕΝΕΡΓΕΙΕΣ ΠΡΟΣ ΥΛΟΠΟΙΗΣΗ ΤΩΝ ΣΤΟΧΩΝ (συνοπτικά σε μορφή bullets)	ΔΕΙΚΤΕΣ ΜΕΤΡΗΣΗΣ	ΧΡΟΝΙΚΟΣ ΠΡΟΓΡΑΜΜΑΤΙΣΜΟΣ	ΕΥΘΥΝΗ ΥΛΟΠΟΙΗΣΗΣ
1. ΕΚΠΑΙΔΕΥΣΗ Αφοσίωση στην ποιοτική εκπαίδευση	Α. Προσφορά ποιοτικών και διεθνώς ανταγωνιστικών προγραμμάτων σπουδών	Α1. Βελτίωση/αύξηση ποιότητας του Προπτυχιακού και Μεταπτυχιακών Προγράμματος Σπουδών - Προσφορά ανταγωνιστικών προγραμμάτων.	Α1.1 Μελέτες και συστάσεις στο Συμβούλιο για θέματα ΠΣ: - Ανασκόπηση/θεώρηση Προγράμματος Σπουδών Ισοκαταμερισμός βάρους σε εξάμηνα Αναθεώρηση κανόνων (Βαθμός προαπαιτουμένου - Προαπαιτούμενα - Άλλα) - Αναθεώρηση ΕCTS μαθημάτων, ομοιομορφία ωρών, άλλα Ανασκόπηση/επικαιροποίηση ύλης	Α1.1 - Βαθμός ικανοποίησης φοιτητών (στατιστικά από ερωτηματολόγιο πόρταλ - αξιολόγηση μαθήματος) [Απαιτείται βελτίωση του θεσμού και του ερωτηματολογίου από ΥΣΦΜ]	Α1.1 – Δεκέμβριος 2018	Α1.1 - ΕΠΣ - ΥΣΦΜ
			Α1.2 Διεξαγωγή έρευνας στο τι προσφέρουν τα άλλα πανεπιστήμια και το τι ζητά η Κυπριακή αγορά - Επί διπλώματι εργασία - Αποτελέσματα προς συζήτηση στην ΕΠΣ.	Α1.2 - Βαθμός ικανοποίησης φοιτητών (στατιστικά από ειδικό ερωτηματολόγιο)	Α1.2 - Δεκέμβριος 2018	Α1.2 - Αγγελή
			A1.3 Δημιουργία επιτροπών ύλης με πιθανή συμμετοχή ατόμων από βιομηχανία - Μελέτη για δημιουργία	Α1.3 Βαθμός ικανοποίησης φοιτητών (στατιστικά από ερωτηματολόγιο πορταλ - αξιολόγηση μαθήματος)	Α1.3 Δεκέμβριος 2018	Α1.3. Π. Ελευθερίου, Κ. Χριστοφή, ΥΔΒ, ΥΣΦΜ.

	ερωτηματολογίου προς εργοδότες ως μέρος της Πρακτικής 'Άσκησης.	[Δημιουργία ειδικού ερωτηματολογίου από ΥΣΦΜ] -Ικανοποίηση εργοδοτών (ερωτηματολόγια στη Πρακτική Άσκηση) Α1.4 - Εκθέσεις από		
	Α1.4 Ανασκόπηση /θεώρηση Προγράμματος Σπουδών με πιθανά θέματα ΜΣ: - Ισοκαταμερισμός βάρους σε εξάμηνα Αναθεώρηση κανόνων - Αναθεώρηση ΕCTS μαθημάτων, ομοιομορφία ωρών, άλλα Ανασκόπηση /επικαιροποίηση ύλης με πιθανή συμβολή ατόμων από τη βιομηχανία	ΥΣΦΜ, ΥΔΒ για σταδιοδρομία αποφοίτων, κατάταξη προγράμματος από Διεθνείς Οργανισμούς αξιολόγησης	Α1.4 - Εκθέσεις μέχρι Σεπτέμβριο, Εισηγήσεις στο Συμβούλιο μέχρι Δεκέμβριο 2018	Α1.4 - ΕΜΣ - ΥΣΦΜ - ΥΔΒ
Α2. Πιστοποίηση Φορέα. - Τμήμα - Πρόγραμμα σπουδών	Α2.1 Προεργασία για πιστοποίηση 2019 (ΕΠΣ). Α2.2 Προεργασία για πιστοποίηση 2019 (ΕΜΣ).		Α2. Βάσει προγραμματισμού / οδηγιών	Α2. Επ. Ποιότητας - Συμβούλιο – ΕΠΣ - ΕΜΣ