Doc. Number: 300.1.1

Cyprus Agency of Quality Assurance and Accreditation in Higher Education

Republic of Cyprus

External Evaluation Report

Program of Study

Institution: UCLan Cyprus

Program of Study: BEng (Hons) Mechanical Engineering

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INSTRUCTIONS:

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 2016" [N. 136 (I)/2015].

The document is duly completed by the External Evaluation Committee for each program of study. The ANNEX (Doc. Number 300.1) constitutes an integral part of the external evaluation report for the external evaluation accreditation of a program of study.

EXTERNAL EVALUATION COMMITTEE:

NAME	TITLE	UNIVERSITY / INSTITUTION
Pavlos Aleiferis	Professor	Imperial College
Stavroula Balabani	Associate Professor	University College London
Kyriakos Eystathiou	Professor	Aristotle University of Thessaloniki
Dinos Nicolaides	Eur. Ing. Dipl. Ing. Msc	ETEK
Andreas Demou	PhD Student	University of Cyprus

INTRODUCTION:

I. The External Evaluation procedure

- Short description of the documents that have been studied, of the on site visit meetings, and of the on site visit to the infrastructures.

II. The Internal Evaluation procedure

- Comments concerning the quality and the completeness of the application submitted by the institution of higher education (Doc. Number 200.1), as well as concerning the overall acceptance of and participation in the quality assurance procedures, by the institution in general and by the program of study under evaluation in particular.

The committee received the following documents:

- an updated Application for Evaluation- Accreditation (note this had several differences to the electronic copy received by the Agency)-including a missing module descriptor.
- copy of the presentations given during the visit
- list of equipment to be purchased
- list of Erasmus agreements
- curriculum skills map
- qualifications of shortlisted candidates for the programme posts (anonymised)
- programme structure and IMechE accreditation conditions and responses of equivalent UCLan UK programme
- plans of the engineering labs

During the visit the committee had the chance to speak to the UK mechanical engineering team via Weblink and visit all the facilities relevant to the programme (e.g. engineering labs, lecture rooms, computer rooms, library, and workshop).
In addition the committee had the chance to speak to 4 students studying in existing programmes (computer science and electrical engineering).

FINDINGS:

1. EFFECTIVENESS OF TEACHING WORK – AVAILABLE RESOURCES

- **Organization of Teaching Work**

  Admission criteria: Although Mathematics has been included in the admissions requirements, there is no requirement for Physics; the committee felt that Physics should be included.

  It is not clear what the interview process involves and what specific criteria are being used for admission of the non-qualifying applicants. Ideally it would be good if some of the applicants who meet the standard qualifications for entry were also interviewed.

  Procedures: On the basis of the information the committee received, procedures and mechanisms for implementation are in place but these will be proven in practice only after the program starts running.

  Infrastructure and facilities: There is good general infrastructure to support the programme and there are good teaching and computing facilities available. However, there are currently no mechanical engineering labs, although some provision has already been made in terms of space and new equipment to be purchased. On the basis of the list of equipment that was provided to the committee and their delivery dates, it is not clear how this equipment will be linked to specific learning outcomes and/or how it will be embedded in the programme of study to support specific modules. However, it is noted that the list appears incomplete for a fully functioning mechanical engineering department. For example, there is no surface characterization equipment (roughness), internal combustion engines, turbomachinery equipment, etc. Furthermore, some of the equipment listed appears suitable only for light teaching purposes and not for research purposes which might impact on project work and provision for academic staff research. It is also not clear why this particular list of equipment was selected, under what criteria, especially given the fact that there is no academic staff in place to support core mechanical engineering subjects.

  Although the committee could score sections 1.1.4.4 – 1.1.12 higher, a score of 4 was given due to the fact that the programme is not running yet and hence actual mechanisms and procedures in place for the particular programme could not be assessed.

- **Teaching**

  The teaching methodology in several modules appears to be simply “copy-paste” even though the modules and their outcomes are completely different.

  Regarding point 1.2.1, as mentioned earlier for section 1.1.4, the lack of laboratory facilities and sessions can hinder the learning outcomes in such a way that the objectives could not be met for specific modules.

  There is large variability in the assessment methods from course to course in terms of the weight given in final exam and course work. The committee felt that, although some discretion can be exercised by academics, it would be good if there was some degree of harmonization.

  Although we could score some sections under 1.2. higher, a score of 4 was given due to the fact that the programme is not running yet and hence the

actual mechanisms and procedures in place for this particular programme could not be assessed.

- **Teaching personnel**

  The programme coordinator / course leader must hold mechanical engineering degrees (both first degree and doctorate) and have proven track record and experience, ideally a higher rank academic. At this point in time there is no appointed programme coordinator / course leader although the recruitment process has started. Hence, this programme has been designed without a programme coordinator / course leader in place. It is appreciated that input to the design of the programme has been provided by UCLAN UK. Nevertheless, it is also noted that the equivalent UK programme is a young programme that has not received full accreditation by IMechE yet.

  In the document provided there are only six academics (one of which is part time) listed to support this programme, mainly of lower rank. Although they are qualified to PhD level, none of them is Mechanical Engineer by education. There are plans to recruit two additional full time members of staff (one Assistant Prof. and one Lecturer), but the committee felt that this is still not sufficient to support a demanding Mechanical Engineering programme.

  On the basis of the figures provided, criteria 1.3.8 and 1.3.9 is considered adequate.

2. PROGRAM OF STUDY AND HIGHER EDUCATION QUALIFICATIONS

Purpose and Objectives and learning outcomes of the Program of Study

The committee felt that some core mechanical engineering modules, like Machine Elements, Dynamics and Vibrations, Electrical Machines, etc. are either missing completely or are partially covered in other modules without enough clarity for the professional body to assess.

The teaching materials are partially adequate and it is noted that the library doesn't hold hard copies of text books, specific to the modules of the course. In addition, module descriptors provide a long bibliography list without specifying what is the recommended textbook/textbooks for the module.

It is not clear how the existing equipment and the equipment to be purchased is linked to specific laboratory sessions and specific modules. Moreover, there are critical pieces of laboratory equipment missing, as also noted earlier.

Similar comments can be found in previous sections on the method of assessment.

Structure and Content of the Program of studies

Although there is clarity with respect to the expected learning outcomes, the necessary content, teaching and learning approaches and method of assessment lack clarity as commented on in previous sections.

The committee felt that the ECTS allocated to some modules are not well thought through. For example there are 20 ECTS allocated to English Language in the first year and only 5 ECTS allocated to Stress Analysis. In order to increase ECTS of some proposed core engineering modules and also to allow the introduction of new core engineering modules currently not in the proposed programme, it is suggested that the English Language module is run as an extra-curricular activity in the first year for those students who need it or the language admission criteria are modified requiring a higher IELTS score.

There is no consistency as to which prerequisites apply to specific modules.

According to the documentation the committee received, no general education courses are offered in the programme.

In addition to comments made previously, it is noted that the content of some of the modules, for example Fluid Mechanics, is too broad to achieve the expected learning outcomes within the ECTS allocated. On top of that there are critical parts missing, e.g. the Navier-Stokes equations are missing from the Fluid Mechanics module descriptor.

Methods that could be designed to cater for students with special needs were not provided. This was also scored as N/A in the internal evaluation document.

Quality Assurance of the Program of studies

There are robust procedures in place for quality assurance as dictated by the UK partner.

Management of the Program of Study

Although the academic hierarchy of the institution is in place for the academic excellence and development of the programme of study, the low scoring of sections 2.4.1 – 2.4.4 is based on the fact that there is no academic mechanical engineer coordinator in place yet.

International Dimension of the Program of Study

There is agreed provision for Erasmus exchange students. However, the proposed programme of study in UCLan Cyprus is not immediately compatible with corresponding programs abroad. Similarly it is not compatible with corresponding programmes in Cyprus.

Connection with the labor market and the society

Although the University has procedures in place and has conducted a feasibility study, the suggested programme of study possesses risks in its current form because it does not fully comply with professional body accreditation.

3. RESEARCH WORK AND SYNERGIES WITH TEACHING

Research Teaching Synergies

Although some evidence was provided to the committee that existing (non-mechanical) engineering academics have attracted external funding, the committee cannot comment on research funding relevant to mechanical engineering, since there are no such full time academics locally involved with this programme yet.

Student training in research processes is procedurally accounted for by the final year project only.

4. ADMINISTRATION SERVICES, STUDENT WELFARE AND SUPPORT OF TEACHING WORK

Administrative Mechanisms

There are robust procedures in place for quality assurance as dictated by the UK partner.

Infrastructures / Support

Score related to equipment is based on comments in previous section regarding mechanical engineering laboratories.

Score related to books is based on the fact that there are electronic databases and e-books, but no hard copies available in the library.

Financial Resources

The business plan that was submitted with the application was inaccurate and incomplete although the committee were told that it would be updated.

Tuition fees and remuneration of personnel is competitive with other private Universities in Cyprus according to the figures that were communicated during the visit. Nevertheless, the committee cannot comment on comparison with public Universities in Cyprus.

5. DISTANCE LEARNING PROGRAMS

6. DOCTORAL PROGRAMS OF STUDY

CONCLUSIONS AND SUGGESTIONS OF THE EXTERNAL EVALUATION COMMITTEE[1]

- The present situation of the program, good practices, weaknesses that have been detected during the external evaluation procedure by the external evaluation committee, suggestions for improvement.

The programme was developed without a core Mechanical Engineer acting locally as Programme Coordinator / Course Leader and this is evident in the proposed syllabus. However, input has been provided by UCLan UK whose equivalent programme has undergone a similar accreditation exercise.

The close link of the university with UCLan UK ensures that there are robust regulations and procedures for quality assurance, monitoring and student support and these are followed closely. The university, leadership and the staff involved in the process of introducing the proposed programme are committed to make it succeed. There is good infrastructure in terms of teaching and computing rooms, library as well as space available to develop mechanical engineering labs. There are MoU with local industry and other universities as well as student exchange programmes. The existing members of staff are qualified to the highest level and are encouraged and supported to pursue research. However, there is currently no single mechanical engineer academic in the School of Sciences. The existing students on other courses are well supported and commented highly on the individual attention they receive due to small classes.

However, according to the scores awarded throughout this evaluation document and the respective justification the committee concludes that the proposed programme lacks the necessary rigour to award Mechanical Engineering degrees equivalent to those awarded by other national and international Universities and compliant with professional bodies.

The mechanical engineering academic staff required to support the programme are in the process of recruitment. There are around 22 new modules to be delivered and the proposed full time staffing arrangements might not be adequate.

The lab facilities and mechanical engineering equipment to support the programme are yet to be purchased; there is no clarity on lab/practical work links to proposed programme modules.

In view of the findings of this evaluation, it is suggested that the programme of study should be redesigned by taking into consideration the comments of the committee and the syllabi of current, fully accredited, mechanical engineering programmes in Cyprus and abroad.

[1] It is highlighted, at this point, that the External Evaluation Committee is expected to justify its findings and its suggestions on the basis of the Document num.: 300.1. The External Evaluation Committee is not expected to submit a suggestion for the approval or the rejection of the program of study under evaluation. This decision falls under the competencies of the Council of the Agency of Quality Assurance and Accreditation of higher education.

Doc. Number: 300.1

Quality Standards and Indicators

External Evaluation of a Program of Study

Institution: UCLan Cyprus
Program of Study: BEng (Hons) Mechanical Engineering
Duration of the Program of Study: 4 years
Evaluation Date: 25/05/2017

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 2016".

The document describes the quality standards and indicators, which will be applied for the external evaluation of programs of study of institutions of higher education, by the External Evaluation Committee.

DIRECTIONS: Note what is applicable for each quality standard/indicator.

1. Applicable to a minimum degree
2. Applicable to a non satisfactory degree
3. Applicable to a satisfactory degree
4. Applicable to a very satisfactory degree
5. It applies and it constitutes a good practice

It is pointed out that, in the case of standards and indicators that cannot be applied due to the status of the institution and/or of the program of study, N/A (= Not Applicable) should be noted and a detailed explanation should be provided on the institution's corresponding policy regarding the specific quality standard or indicator.

*: The external committee uses a star symbol to indicate that they had no detailed information in that particular area to make an informed assessment.

Members of the External Evaluation Committee

NAME	TITLE	UNIVERSITY / INSTITUTION
Pavlos Aleiferis	Professor	Imperial College
Stavroula Balabani	Associate Professor	University College London
Kyriakos Eystathiou	Professor	Aristotle University of Thessaloniki
Dinos Nicolaides	Eur. Ing. Dipl. Ing. Msc	ETEK
Andreas Demou	PhD Student	University of Cyprus

Date and Time of the On-Site Visit: 24/05/2017 9:30

Duration of the On-Site Visit: 6 hrs

1. EFFECTIVENESS OF TEACHING WORK – AVAILABLE RESOURCES							
1.1	**Organization of teaching work**		**1**	**2**	**3**	**4**	**5**
1.1.1	The student admission requirements to the program of study, are based on specific regulations which are adhered to in a consistent manner.					√	
1.1.2	The number of students in each class allows for constructive teaching and communication, and it compares positively to the current international standards and/or practices.						√
1.1.3	The organization of the educational process safeguards the quality implementation of the program's purpose and objectives and the achievement of the learning outcomes. Particularly, the following are taken into consideration:						
	1.1.3.1	The implementation of a specific academic calendar and its timely publication.				√	
	1.1.3.2	The disclosure of the program's curricula to the students, and their implementation by the teaching personnel				√	
	1.1.3.3	The course web-pages, updated with the relevant supplementary material				√	
	1.1.3.4	The procedures for the fulfillment of undergraduate and postgraduate assignments / practical training				√	
	1.1.3.5	The procedures for the conduct and the format of the examinations and for student assessment				√	
	1.1.3.6	The effective provision of information to the students and the enhancement of their participation in the procedures for the improvement of the educational process.				√	
1.1.4	Adequate and modern learning resources, are available to the students, including the following:						
	1.1.4.1	facilities		√			
	1.1.4.2	library			√		
	1.1.4.3	infrastructure			√		

	1.1.4.4	student welfare				√	
	1.1.4.5	academic mentoring				√	
1.1.5	A policy for regular and effective communication, between the teaching personnel and the students, is applied.					√	
1.1.6	The teaching personnel, for each course, provide timely and effective feedback to the students.					√	
1.1.7	Statutory mechanisms, for the support of students and the communication with the teaching personnel, are effective.					√	
1.1.8	Control mechanisms for student performance are effective.					√	
1.1.9	Support mechanisms for students with problematic academic performance are effective.					√	
1.1.10	Academic mentoring processes are transparent and effective for undergraduate and postgraduate programs and are taken into consideration for the calculation of academic work load.					√	
1.1.11	The program of study applies an effective policy for the prevention and detection of plagiarism.					√	
1.1.12	The program of study provides satisfactory mechanisms for complaint management and for dispute resolution.					√	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Admission criteria: Although Mathematics has been included in the admissions requirements, there is no requirement for Physics; the committee felt that Physics should be included.

It is not clear what the interview process involves and what specific criteria are being used for admission of the non-qualifying applicants. Ideally it would be good if some of the applicants who meet the standard qualifications for entry were also interviewed.

Procedures: On the basis of the information the committee received, procedures and mechanisms for implementation are in place but these will be proven in practice only after the program starts running.
Infrastructure and facilities: There is good general infrastructure to support the programme and there are good teaching and computing facilities available. However, there are currently no mechanical engineering labs, although some provision has already been made in terms of space and new equipment to be purchased. On the basis of the list of equipment that was provided to the committee and their delivery dates, it is not clear how this equipment will be linked to specific learning outcomes and/or how it will be embedded in the programme of study to support specific modules. However, it is noted that the list appears incomplete for a fully functioning

mechanical engineering department. For example, there is no surface characterization equipment (roughness), internal combustion engines, turbomachinery equipment, etc. Furthermore, some of the equipment listed appears suitable only for light teaching purposes and not for research purposes which might impact on project work and provision for academic staff research. It is also not clear why this particular list of equipment was selected, under what criteria, especially given the fact that there is no academic staff in place to support core mechanical engineering subjects.
Although the committee could score sections 1.1.4.4 – 1.1.12 higher, a score of 4 was given due to the fact that the programme is not running yet and hence actual mechanisms and procedures in place for the particular programme could not be assessed.

Note, additionally:

α) the expected number of Cypriot and International Students in the program of study.
β) the countries of origin of the majority of students.

γ) the maximum planned number of students per class-section.

These points are not for this committee to comment on.

1.2	**Teaching**	**1**	**2**	**3**	**4**	**5**
1.2.1	The methodology utilized in each course is suitable for achieving the course's purpose and objectives and those of the individual modules.			√		
1.2.2	The methodology of each course is suitable for adults.					√
1.2.3	Continuous-formative assessment and feedback are provided to the students regularly.				√	
1.2.4	The assessment system and criteria regarding student course performance, are clear, adequate, and known to the students.			√		
1.2.5	Educational activities which encourage students' active participation in the learning process, are implemented.				√	
1.2.6	Teaching incorporates the use of modern educational technologies that are consistent with international standards, including a platform for the electronic support of learning.				√	

1.2.7	Teaching materials (books, manuals, journals, databases, and teaching notes) meet the requirements set by the methodology of the program's individual courses, and are updated regularly.				√	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

The teaching methodology in several modules appears to be simply "copy-paste" even though the modules and their outcomes are completely different.
Regarding point 1.2.1, as mentioned earlier for section 1.1.4, the lack of laboratory facilities and sessions can hinder the learning outcomes in such a way that the objectives could not be met for specific modules.
There is large variability in the assessment methods from course to course in terms of the weight given in final exam and course work. The committee felt that, although some discretion can be exercised by academics, it would be good if there was some degree of harmonization.
Although we could score some sections under 1.2. higher, a score of 4 was given due to the fact that the programme is not running yet and hence the actual mechanisms and procedures in place for this particular programme could not be assessed.

1.3	**Teaching Personnel**		**1**	**2**	**3**	**4**	**5**
1.3.1	The number of full-time academic personnel, occupied exclusively at the institution, and their fields of expertise, adequately support the program of study.		√				
1.3.2	The members of teaching personnel for each course have the relevant formal and fundamental qualifications for teaching the course, as described by the legislation, including the following:						
	1.3.2.1	Subject specialization, preferably with a doctorate, in the discipline.	√				
	1.3.2.2	Publications within the discipline.	√				
1.3.3	The specializations of Visiting Professors adequately support the program of study.				*		
1.3.4	Special Teaching Personnel and Special Scientists have the necessary qualifications, adequate work experience and specialization to teach a limited number of courses in the program of study.				*		
1.3.5	In every program of study the Special Teaching Personnel does not exceed 30% of the Teaching Research Personnel.				*		

1.3.6	The teaching personnel of each private institution of tertiary education, to a percentage of at least 70%, has recognized academic qualification, by one level higher than that of the program of study in which he/she teaches.			*		
1.3.7	In the program of study, the ratio of the number of courses taught by full-time personnel, occupied exclusively at the institution, to the number of courses taught by part-time personnel, ensures the quality of the program of study.		√			
1.3.8	The ratio of the number of students to the total number of teaching personnel is adequate for the support and safeguarding of the program's quality.				√	
1.3.9	The academic personnel's teaching load does not limit the conduct of research, writing, and contribution to the society.				√	
1.3.10	Future redundancies / retirements, expected recruitment and promotions of academic personnel safeguard the unimpeded implementation of the program of study within a five-year span.				√	
1.3.11	The program's Coordinator has the qualifications and experience to efficiently coordinate the program of study.	√				

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

The programme coordinator / course leader must hold mechanical engineering degrees (both first degree and doctorate) and have proven track record and experience, ideally a higher rank academic. At this point in time there is no appointed programme coordinator / course leader although the recruitment process has started. Hence, this programme has been designed without a programme coordinator / course leader in place. It is appreciated that input to the design of the programme has been provided by UCLAN UK. Nevertheless, it is also noted that the equivalent UK programme is a young programme that has not received full accreditation by IMechE yet.
In the document provided there are only six academics (one of which is part time) listed to support this programme, mainly of lower rank. Although they are qualified to PhD level, none of them is Mechanical Engineer by education. There are plans to recruit two additional full time members of staff (one Assistant Prof. and one Lecturer), but the committee felt that this is still not sufficient to support a demanding Mechanical Engineering programme.
On the basis of the figures provided, criteria 1.3.8 and 1.3.9 is considered adequate.

2. PROGRAM OF STUDY AND HIGHER EDUCATION QUALIFICATIONS						
2.1	**Purpose and Objectives and learning outcomes of the Program of Study**	**1**	**2**	**3**	**4**	**5**
2.1.1	The purpose and objectives of the program of study are formulated in terms of expected learning outcomes and are consistent with the mission and the strategy of the institution.		√			
2.1.2	The purpose and objectives of the program and the learning outcomes are utilized as a guide for the design of the program of study.		√			
2.1.3	The higher education qualification and the program of study, conform to the provisions of their corresponding Professional and Vocational Bodies for the purpose of registration to these bodies.		√			
2.1.4	The program's content, the methods of assessment, the teaching materials and the equipment, lead to the achievement of the program's purpose and objectives and ensure the expected learning outcomes.		√			
2.1.5	The expected learning outcomes of the program are known to the students and to the members of the academic and teaching personnel.				√	
2.1.6	The learning process is properly designed to achieve the expected learning outcomes.		√			
2.1.7	The higher education qualification awarded to the students, corresponds to the purpose and objectives and the learning outcomes of the program.		√			

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

The committee felt that some core mechanical engineering modules, like Machine Elements, Dynamics and Vibrations, Electrical Machines, etc. are either missing completely or are partially covered in other modules without enough clarity for the professional body to assess.

The teaching materials are partially adequate and it is noted that the library doesn't hold hard copies of text books, specific to the modules of the course. In addition, module descriptors provide a long bibliography list without specifying what is the recommended textbook/textbooks for the module.

It is not clear how the existing equipment and the equipment to be purchased is linked to specific laboratory sessions and specific modules. Moreover, there are critical pieces of laboratory equipment missing, as also noted earlier.

Similar comments can be found in previous sections on the method of assessment.

2.2	Structure and Content of the Program of Study	1	2	3	4	5
2.2.1	The course curricula clearly define the expected learning outcomes, the content, the teaching and learning approaches and the method of assessing student performance.		√			
2.2.2	The European Credit Transfer System (ECTS) is applied and there is true correspondence between credits and workload per course and per semester for the student either he / she studies in a specific program or he/she is registered and studies simultaneously in additional programs of studies according to the European practice in higher education institutions.		√			
2.2.3	The program of study is structured in a consistent manner and in sequence, so that concepts operating as preconditions precede the teaching of other, more complex and cognitively more demanding, concepts.		√			
2.2.4	The higher education qualification awarded, the learning outcomes and the content of the program are consistent.		√			
2.2.5	The program, in addition to the courses focusing on the specific discipline, includes an adequate number of general education courses.	√				
2.2.6	The content of courses and modules, and the corresponding educational activities are suitable for achieving the desired learning outcomes with regards to the knowledge, skills, and abilities which should be acquired by students.		√			
2.2.7	The number and the content of the program's courses are sufficient for the achievement of learning outcomes.		√			
2.2.8	The content of the program's courses reflects the latest achievements / developments in science, arts, research and technology.		√			
2.2.9	Flexible options / adaptable to the personal needs or to the needs of students with special needs, are provided.			*		

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Although there is clarity with respect to the expected learning outcomes, the necessary content, teaching and learning approaches and method of assessment lack clarity as commented on in previous sections.

The committee felt that the ECTS allocated to some modules are not well thought

through. For example there are 20 ECTS allocated to English Language in the first year and only 5 ECTS allocated to Stress Analysis. In order to increase ECTS of some proposed core engineering modules and also to allow the introduction of new core engineering modules currently not in the proposed programme, it is suggested that the English Language module is run as an extra-curricular activity in the first year for those students who need it or the language admission criteria are modified requiring a higher IELTS score.

There is no consistency as to which prerequisites apply to specific modules.

According to the documentation the committee received, no general education courses are offered in the programme.

In addition to comments made previously, it is noted that the content of some of the modules, for example Fluid Mechanics, is too broad to achieve the expected learning outcomes within the ECTS allocated. On top of that there are critical parts missing, e.g. the Navier-Stokes equations are missing from the Fluid Mechanics module descriptor.

Methods that could be designed to cater for students with special needs were not provided. This was also scored as N/A in the internal evaluation document.

Note the expected number of students who will be studying simultaneously at another academic institution, based on your experience so far, regarding students who study simultaneously in the programs of your institution.

These points are not for this committee to comment on.

2.3	**Quality Assurance of the Program of Study**		**1**	**2**	**3**	**4**	**5**
2.3.1	The arrangements regarding the program's quality assurance define clear competencies and procedures.					√	
2.3.2	Participation in the processes of the system of quality assurance of the program, is ensured for						
	2.3.2.1	the members of the academic personnel				√	
	2.3.2.2	the members of the administrative personnel				√	
	2.3.2.3	the students.				√	
2.3.3	The guide and / or the regulations for quality assurance, provide detailed information and data for the support and management of the program of study.					√	
2.3.4	The quality assurance process constitutes an academic process and it is not restricted by non-academic factors.					√	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

There are robust procedures in place for quality assurance as dictated by the UK partner.

2.4	**Management of the Program of Study**		**1**	**2**	**3**	**4**	**5**
2.4.1	Effective management of the program of study with regard to its design, its approval, its monitoring and its review, is in place.			√			
2.4.2	It is ensured that learning outcomes may be achieved within the specified timeframe.			√			
2.4.3	It is ensured that the program's management and development process is an academic process which operates without any non-academic interventions.			√			
2.4.4	The academic hierarchy of the institution, (Rector, Vice-Rectors, Deans, Chairs and Programs' Coordinators, academic personnel) have the sole responsibility for academic excellence and the development of the programs of study.			√			
2.4.5	Information relating to the program of study are posted publicly and include:						
	2.4.5.1	The provisions regarding unit credits				√	
	2.4.5.2	The expected learning outcomes				√	
	2.4.5.3	The methodology				√	
	2.4.5.4	Course descriptions				√	
	2.4.5.5	The program's structure				√	
	2.4.5.6	The admission requirements				√	
	2.4.5.7	The format and the procedures for student assessment				√	
2.4.6	The award of the higher education qualification is accompanied by the Diploma Supplement which is in line with the European and international standards.						√
2.4.7	The effectiveness of the program's evaluation mechanism, by the students, is ensured.					√	
2.4.8	The recognition and transfer of credit units from previous studies is regulated by procedures and regulations which ensure that the majority of credit units is awarded by the institution which awards the higher education qualification.				*		
Justify the answer you have provided and note the additional comments you may							

have on each standard / indicator.

Although the academic hierarchy of the institution is in place for the academic excellence and development of the programme of study, the low scoring of sections 2.4.1 – 2.4.4 is based on the fact that there is no academic mechanical engineer coordinator in place yet.

In the case of practical training, note:

- The number of credit units for courses and the number of credits for practical training
- In which semester does practical training takes place?
- Note if practical training is taking place in a country other than the homecountry of the institution which awards the higher education qualification

These points are not for this committee to comment on.

2.5	**International Dimension of the Program of Study**	**1**	**2**	**3**	**4**	**5**
2.5.1	The program's collaborations with other institutions are compared positively with corresponding collaborations of other departments / programs of study in Europe and internationally.			N / A		
2.5.2	The program attracts Visiting professors of recognized academic standing.			N / A		
2.5.3	Students participate in exchange programs.				√	
2.5.4	The academic profile of the program of study is compatible with corresponding programs of study in Cyprus and internationally.	√				

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

There is agreed provision for Erasmus exchange students. However, the proposed programme of study in UCLan Cyprus is not immediately compatible with corresponding programs abroad. Similarly it is not compatible with corresponding programmes in Cyprus.

Also, comment on the degree the program compares positively with corresponding programs operating in Cyprus and abroad in higher education institutions of the same rank.

2.6	**Connection with the labor market and the society**	**1**	**2**	**3**	**4**	**5**
2.6.1	The procedures applied, so that the program conforms to the scientific and professional activities of the graduates,		√			

	are adequate and effective.					
2.6.2	According to the feasibility study, indicators for the employability of graduates are satisfactory.			√		
2.6.3	Benefits, for the society, deriving from the program are significant.		√			
Justify the answer you have provided and note the additional comments you may have on each standard / indicator. Although the University has procedures in place and has conducted a feasibility study, the suggested programme of study possesses risks in its current form because it does not fully comply with professional body accreditation.						

3. RESEARCH WORK AND SYNERGIES WITH TEACHING						
3.1	**Research - Teaching Synergies**	**1**	**2**	**3**	**4**	**5**
3.1.1	It is ensured that teaching and learning have been adequately enlightened by research.		√			
3.1.2	New research results are embodied in the content of the program of study.		√			
3.1.3	Adequate and sufficient facilities and equipment are provided to support the research component of the program of study, which are available and accessible to the personnel and the students.	√				
3.1.4	The results of the academic personnel's research activity are published in international journals with the peer-reviewing system, in international conferences, conference minutes, publications etc.			√		
3.1.5	External, non-governmental, funding for the academic personnel's research activities, is compared positively to the funding of other institutions in Cyprus and abroad.			*		
3.1.6	Internal funding, of the academic personnel's research activities, is compared positively to the funding of other institutions in Cyprus and abroad.			*		
3.1.7	The policy for, indirect or direct, internal funding of the academic personnel's research activity is satisfactory.			*		
3.1.8	The participation of students, academic, teaching and administrative personnel of the program in research			N / A		

	activities and projects is satisfactory.					
3.1.9	Student training in the research process is sufficient.			√		

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Although some evidence was provided to the committee that existing (non-mechanical) engineering academics have attracted external funding, the committee cannot comment on research funding relevant to mechanical engineering, since there are no such full time academics locally involved with this programme yet.

Student training in research processes is procedurally accounted for by the final year project only.

4. ADMINISTRATION SERVICES, STUDENT WELFARE AND SUPPORT OF TEACHING WORK

4.1	**Administrative Mechanisms**	**1**	**2**	**3**	**4**	**5**
4.1.1	There is a Student Welfare Service that supports students with regards to academic and personal problems and difficulties.					√
4.1.2	Statutory administrative mechanisms for monitoring and supporting students are sufficient.					√
4.1.3	The efficiency of these mechanisms is assessed on the basis of specific criteria.					√

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

There are robust procedures in place for quality assurance as dictated by the UK partner.

4.2	**Infrastructure / Support**	**1**	**2**	**3**	**4**	**5**
4.2.1	There are suitable books and reputable journals supporting the program.			√		
4.2.2	There is a supportive internal communication platform.				√	
4.2.3	The facilities are adequate in number and size.		√			
4.2.4	The equipment used in teaching and learning (laboratory and electronic equipment, consumables etc) are quantitatively and qualitatively adequate.		√			
4.2.5	Teaching materials (books, manuals, scientific journals,			√		

	databases) are adequate and accessible to students.					
4.2.6	Teaching materials (books, manuals, scientific journals, databases) are updated regularly with the most recent publications.			√		
4.2.7	The teaching personnel are provided with training opportunities in teaching method, in adult education, and in new technologies on the basis of a structured learning framework.					√
Justify the answer you have provided and note the additional comments you may have on each standard / indicator. Score related to equipment is based on comments in previous section regarding mechanical engineering laboratories. Score related to books is based on the fact that there are electronic databases and e-books, but no hard copies available in the library.						
4.3	**Financial Resources**	**1**	**2**	**3**	**4**	**5**
4.3.1	The management and allocation of the financial resources of the program of study, allow for the development of the program and of the academic / teaching personnel.		√			
4.3.2	The allocation of financial resources as regards to academic matters, is the responsibility of the relevant academic departments.			*		
4.3.3	The remuneration of academic and other personnel is analogous to the remuneration of academic and other personnel of the respective institutions in Cyprus.			*		
4.3.4	Student tuition and fees are consistent to the tuition and fees of other respective institutions.			√		
Justify the answer you have provided and note the additional comments you may have on each standard / indicator. The business plan that was submitted with the application was inaccurate and incomplete although the committee were told that it would be updated. Tuition fees and remuneration of personnel is competitive with other private Universities in Cyprus according to the figures that were communicated during the visit. Nevertheless, the committee cannot comment on comparison with public Universities in Cyprus.						

The following criterion applies additionally for distance learning programs of study.

5.	**DISTANCE LEARNING PROGRAMS**	**1**	**2**	**3**	**4**	**5**
5.1	Feedback processes for teaching personnel with regards to the evaluation of their teaching work, by the students, are satisfactory.			N / A		
5.2	The process and the conditions for the recruitment of academic / teaching personnel, ensure that candidates have the necessary skills and experience for long distance education.			N / A		
5.3	Through established procedures, appropriate training, guidance and support, are provided to teaching personnel, to enable it to efficiently support the educational process.			N / A		
5.4	Student performance monitoring mechanisms are satisfactory.			N / A		
5.5	Adequate mentoring by the teaching personnel, is provided to students, through established procedures.			N / A		
5.6	The unimpeded long distance communication between the teaching personnel and the students, is ensured to a satisfactory degree.			N / A		
5.7	Assessment consistency, its equivalent application to all students, and the compliance with predefined procedures, are ensured.			N / A		
5.8	Teaching materials (books, manuals, scientific journals, databases) comply with the requirements provided by the long distance education methodology and are updated regularly.			N / A		
5.9	The program of study has the appropriate and adequate infrastructure for the support of learning.			N / A		
5.10	The supporting infrastructures are easily accessible.			N / A		
5.11	Students are informed and trained with regards to the available educational infrastructure.			N / A		
5.12	The procedures for systematic control and improvement of the supportive services are regular and effective.			N / A		

5.13	Infrastructure for distance education is comparable to university infrastructure in the European Union and internationally.			N / A		
5.14	Electronic library services are provided according to international practice in order to support the needs of the students and of the teaching personnel.			N / A		
5.15	The students and the teaching personnel have access to the necessary electronic sources of information, relevant to the program, the level, and the method of teaching.			N / A		
5.16	The percentage of teaching personnel who holds a doctorate, in a program of study which is offered long distance, is not less than 75%.			N / A		

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

If the following apply, note "√"in the appropriate space next to each statement. In case the following statements do not apply, note what is applicable:

The maximum number of students per class-section, should not exceed 30 students.	N / A
The conduct of written examinations with the physical presence of the students, under the supervision of the institution or under the supervision of reliable agencies which operate in the countries of the students, is compulsory.	N / A
The number of long distance classes taught by the academic personnel does not exceed the number of courses taught by the teaching personnel in conventional programs of study.	N / A

The following criterion applies additionally for doctoral programs of study.

6.	**DOCTORAL PROGRAMS OF STUDY**	**1**	**2**	**3**	**4**	**5**
6.1	The provision of quality doctoral studies is ensured through Doctoral Studies Regulations.			N / A		
6.2	The structure and the content of a doctoral program of study are satisfactory and they ensure the quality provision of doctoral studies.			N / A		
6.3	The number of academic personnel, which is going to support the doctoral program of study, is adequate.			N / A		
6.4	The doctoral studies' supervisors have the necessary academic qualifications and experience for the supervision of the specific dissertations.			N / A		
6.5	The degree of accessibility of all interested parties to the Doctoral Studies Regulations is satisfactory.			N / A		
6.6	The number of doctoral students, under the supervision of a member of the academic personnel, is apt for the continuous and effective feedback provided to the students and it complies with the European and international standards.			N / A		
6.7	The research interests of academic advisors and supervisors are satisfactory and they adequately cover the thematic areas of research conducted by the doctoral students of the program.			N / A		

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Note the number of doctoral students under the supervision of each member of the academic personnel of the program and the academic rank of the supervisor.

FINAL REMARKS – SUGGESTIONS

Please note your final remarks and suggestions for the program of study and/or regarding particular aspects of the program.

The programme was developed without a core Mechanical Engineer acting locally as Programme Coordinator / Course Leader and this is evident in the proposed syllabus. However, input has been provided by UCLan UK whose equivalent programme has undergone a similar accreditation exercise.

The close link of the university with UCLan UK ensures that there are robust regulations and procedures for quality assurance, monitoring and student support and these are followed closely. The university, leadership and the staff involved in the process of introducing the proposed programme are committed to make it succeed. There is good infrastructure in terms of teaching and computing rooms, library as well as space available to develop mechanical engineering labs. There are MoU with local industry and other universities as well as student exchange programmes. The existing members of staff are qualified to the highest level and are encouraged and supported to pursue research. However, there is currently no single mechanical engineer academic in the School of Sciences. The existing students on other courses are well supported and commented highly on the individual attention they receive due to small classes.

However, according to the scores awarded throughout this evaluation document and the respective justification the committee concludes that the proposed programme lacks the necessary rigour to award Mechanical Engineering degrees equivalent to those awarded by other national and international Universities and compliant with professional bodies.

The mechanical engineering academic staff required to support the programme are in the process of recruitment. There are around 22 new modules to be delivered and the proposed full time staffing arrangements might not be adequate.

The lab facilities and mechanical engineering equipment to support the programme are yet to be purchased; there is no clarity on lab/practical work links to proposed programme modules.

In view of the findings of this evaluation, it is suggested that the programme of study should be redesigned by taking into consideration the comments of the committee and the syllabi of current, fully accredited, mechanical engineering programmes in Cyprus and abroad.

Names and Signatures of the Chair and the Members of the External Evaluation Committee:

Name:	**Signature:**
Pavlos Aleiferis	
Stavroula Balabani	
Kyriakos Eystathiou	
Dinos Nicolaides	
Andreas Demou	

Date: 25/05/2017