



Doc. 300.3.1/1

Date: 2024.03.02

# External Evaluation Report

(Programmatic within the framework of Departmental Evaluation)

- **Higher Education Institution:**  
University of Cyprus
- **Town:** Nicosia
- **School/Faculty:** Faculty of Engineering
- **Department:** Mechanical and Manufacturing Engineering
- **Programme(s) of study - Name (Duration, ECTS, Cycle)**  
**Programme 1 – BSc**  
**In Greek:**  
Programme Name  
**In English:**  
Mechanical and Manufacturing Engineering  
**Language(s) of instruction: Greek and English**  
**Programme 2 – MSc**  
**In Greek:**  
Programme Name  
**In English:**  
Mechanical and Manufacturing Engineering  
**Language(s) of instruction: Greek and English**  
**Programme 3 – PhD**  
**In Greek:**  
Programme Name  
**In English:**  
Mechanical and Manufacturing Engineering  
**Language(s) of instruction: Greek and English**
-



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



eqar /// enqa.

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].



## A. Introduction

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

The External Evaluation Committee (EEC), which was established following an invitation from the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA), thoroughly studied the information contained in the Evaluation Application submitted by the University of Cyprus (UCY) regarding the Department of Mechanical and Manufacturing Engineering (MME). Further information was provided upon request during the evaluation.

The committee members participated in a sequence of sessions with the Vice Rector for Academic Affairs, the Dean of the Faculty of Engineering, and several members of the MME department, and other university officers on February 28th and 29th, 2024, and held extensive discussions on the department's structure, operations and strategy.

On 28th February 2024, the evaluation committee also carried out on-site visits to various premises, current laboratory facilities and support infrastructure of UCY and MME. The committee was also informed about ongoing construction of new premises and laboratory facilities to be commissioned in the near future.



## B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
<b>Pavlos Aleiferis</b>	Professor	Imperial College London
<b>Dmytro Orlov</b>	Professor	Lund University
<b>Dimitrios Kyritsis</b>	Emeritus Professor	Swiss Federal Institute of Technology Lausanne
<b>Iakovos Christodoulou</b>	Member of the registration committee	ETEK
<b>Giorgos Georgiou</b>	Student	Cyprus University of Technology

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

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

### **Findings**

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

### **Strengths**

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

### **Areas of improvement and recommendations**

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

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

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

### Sub-areas

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

### 1.1 Policy for quality assurance

#### Standards

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

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

#### Standards

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

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

### **1.3 Public information**

#### Standards

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

### **1.4 Information management**

#### Standards

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

*You may also consider the following questions:*

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



## **Findings**

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

### **Findings for BSc**

EEC found that education quality assurance system exists at university level, and MME nominally adopts this. Based on the feedback from students and teachers the committee found no specific concerns in the quality of education. However, EEC could not find in the application and presentation materials coherent formalized procedures at MME level that regularly assess quality and continuously improve student experience in the courses.

Some elements of the procedure are stated in the application materials, but it remains unclear how the system actually works. For example, it is unclear how information flows from course evaluation forms to relevant committees and further acted on for improvement of failure and dropout rates. Another important observation relates to dealing with plagiarism. The committee fully appreciates intolerance to the issue. However, penalties in the form of social work appear non-compliant and outdated.

### **Findings for MSc**

The same applies to the MSc and MEng programmes. Furthermore, EEC could not find any quantitative criteria for admission.

### **Findings for PhD**

The same observations apply to this programme. Furthermore, the qualification examination does not seem to formally include a literature survey on the PhD topic to justify the set of objectives.

## **Strengths**

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

### **Strengths for BSc**

Consistent policies for admission. This programme fulfils all the requirements for professional registration with local authorities, ETEK. Based on the interviews with student representatives, it appears that students feel generally well supported by the department personnel, lecture halls and library.

### **Strengths for MSc**

Based on the interviews, students and MME personnel have good rapport.

### **Strengths for PhD**

In general, the programme is strong, attracting motivated students also from abroad.

## **Areas of improvement and recommendations**

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

### **Areas of improvement and recommendations for BSc**

Formalized procedures for quality assurance at the department level should be elaborated and made publicly available.

Areas of improvement and recommendations for MSc

Same recommendations apply to this programme. Furthermore, clearer quantitative admission criteria should be introduced.

Areas of improvement and recommendations for PhD

Same recommendations apply to this programme. Furthermore, the outcome options of the PhD defense and subsequent actions are not specified.

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

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

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

### Sub-areas

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

**2.2 Practical training**

**2.3 Student assessment**

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

#### Standards

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

### **2.2 Practical training**

#### Standards

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

### **2.3 Student assessment**

#### Standards

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

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

*You may also consider the following questions:*

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

## **Findings**

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

### **Findings for BSc**

Feedback from student and teachers indicate general satisfaction and healthy relationships, which indicates that the student-centered learning practices are in place. Knowledge assessment practices seem to be adequate.

### **Findings for MSc**

The above also applies to the masters programmes. In addition, EEC felt that the structure and coherence of the masters programmes are not as strong as the BSc programme. The masters programmes in their present form do not seem to cater for the needs of local job market. This is particularly confusing in the context of two-year degrees with the imposed number of ECTS.

### **Findings for PhD**

The findings for the BSc programme also apply to the PhD programme. At the same time, the set of offered compulsory courses may not be optimally aligned with the needs of selected PhD topics.

## **Strengths**

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

### **Strengths for BSc**

Teaching practices in the Department and communication with students are very good, revealing the existence of rapport between teachers and students. This can also be related to the good balance in student to staff ratio.

### **Strengths for MSc**

The above also applies to the masters programmes.

### **Strengths for PhD**

The above also applies to the PhD programme. The content of research on selected areas seems to be of high international standards.

## **Areas of improvement and recommendations**

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

### **Areas of improvement and recommendations for BSc**

The planning of all educational programmes and the integration of theory and practice can be improved, e.g. through the introduction of hands-on projects and activities with practical outcomes within existing courses. This could be facilitated by exploiting the new buildings and by introducing recommended specialization study streams for students.

### **Areas of improvement and recommendations for MSc**

Based on the interview with students and EEC's understanding of programme structure, the balance between compulsory and elective courses offered may need to be reviewed and improved to better tailor for the needs of students.

Areas of improvement and recommendations for PhD

The comments made to masters programmes also apply to the PhD degree where more flexibility may be necessary in the context of specific PhD topics. Furthermore, PhD-level courses may need to be introduced.

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

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

### 3. Teaching staff (ESG 1.5)

#### **Sub-areas**

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

#### **3.1. Teaching staff recruitment and development**

##### **Standards**

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

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

##### **Standards**

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

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

##### **Standards**

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



- *The allocation of teaching hours compared to the time for research activity is appropriate.*

*You may also consider the following questions:*

- *How are the members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?*
- *How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?*
- *Is teaching connected with research?*
- *Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?*
- *What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?*
- *Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*

### **Findings**

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

#### **Findings for BSc**

Teaching resources appear adequate. Well qualified and highly motivated personnel. The EEC found the Department well-staffed with academic and technical support personnel for the number of students at BSc programme at present. According to information obtained by the EEC during interviews, it is difficult for the Department to attract visiting professors.

#### **Findings for MSc**

Same as above.

#### **Findings for PhD**

Same as above. Furthermore, PhD students in selected areas have access to world-leading level of research facilities and professional networks.

### **Strengths**

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

#### **Strengths for BSc**

Well qualified and strongly motivated academic and other personnel.

#### **Strengths for MSc**

Same as above.



### Strengths for PhD

PhD students in selected areas have access to world-leading level of research facilities and professional networks.

### Areas of improvement and recommendations

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

#### Areas of improvement and recommendations for BSc

The EEC found that professional development for the teaching staff would benefit from the implementation of a mentorship programme in the Department to facilitate the academic promotion procedures.

#### Areas of improvement and recommendations for MSc

Same as above.

#### Areas of improvement and recommendations for PhD

Considering present aspirations of MME for research areas expansion, strategic recruitment should target diversification of faculty outside of existing expertise in the department, considering emerging global trends in mechanical engineering. This will also feed back to the undergraduate and graduate programmes.

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

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

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

##### Sub-areas

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

##### 4.2. Student progression

##### 4.3. Student recognition

##### 4.4. Student certification

#### 4.1 Student admission, processes and criteria

##### Standards

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

#### 4.2 Student progression

##### Standards

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

#### 4.3 Student recognition

##### Standards

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

#### 4.4 Student certification

##### Standards

- *Pre-defined and published regulations regarding student certification are in place.*
- *Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.*

*You may also consider the following questions:*

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

##### **Findings**

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

##### Findings for BSc

Critical findings about student admission have been formulated in Section 1.

##### Findings for MSc

Same as above.

##### Findings for PhD

Same as above.

##### **Strengths**

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

##### Strengths for BSc

Critical findings about student admission have been formulated in Section 1. Furthermore, this programme is fully compliant with ETEK requirements.

##### Strengths for MSc

Critical findings about student admission have been formulated in Section 1.

##### Strengths for PhD

Same as above.

**Areas of improvement and recommendations**

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

**Areas of improvement and recommendations for BSc**

Not applicable.

**Areas of improvement and recommendations for MSc**

Clearer quantitative admission criteria should be introduced.

**Areas of improvement and recommendations for PhD**

Clearer quantitative admission criteria should be introduced.

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

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

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

### Sub-areas

#### 5.1. Teaching and Learning resources

#### 5.2. Physical resources

#### 5.3. Human support resources

#### 5.4. Student support

### 5.1 Teaching and Learning resources

#### Standards

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

### 5.2 Physical resources

#### Standards

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

### 5.3 Human support resources

#### Standards

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

## 5.4 Student support

### Standards

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

*You may also consider the following questions:*

- *Evaluate the supply of teaching materials and equipment (including teaching labs, expendable materials, etc.), the condition of classrooms, adequacy of financial resources to conduct the study programme and achieve its objectives. What needs to be supplemented/ improved?*
- *What is the feedback from the teaching staff on the availability of teaching materials, classrooms, etc.?*
- *Are the resources in accordance with actual (changing) needs and contemporary requirements? How is the effectiveness of using resources ensured?*
- *What are the resource-related trends and future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.)? How are these trends taken into account and how are the risks mitigated?*
- *Evaluate student feedback on support services. Based on student feedback, which support services (including information flow, counselling) need further development?*
- *How is student learning within the standard period of study supported (student counselling, flexibility of the study programme, etc.)?*
- *How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)?*
- *How is student mobility being supported?*

## **Findings**

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

### **Findings for BSc**

All the resources in the BSc programme provided by MME, the faculty and the university appear to be adequate.

### **Findings for MSc**

Same as above. Furthermore, recommended literature on some courses appears to be outdated of difficult to access.

### **Findings for PhD**

Same as above.

## **Strengths**

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

### **Strengths for BSc**

Excellent library. Laboratory facilities in selected areas are outstanding.

### **Strengths for MSc**

Same as above.

### **Strengths for PhD**

Same as above.

## **Areas of improvement and recommendations**

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

### **Areas of improvement and recommendations for BSc**

Recommended literature on some courses needs to be revised regularly. Physical resources for teaching will benefit from consolidating facilities in the new premises on one campus.

### **Areas of improvement and recommendations for MSc**

Same as above.

### **Areas of improvement and recommendations for PhD**

Same as above.

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

Sub-area	<p style="text-align: center;"><b>Non-compliant/ Partially Compliant/Compliant</b></p>
----------	--

		<i>BSc</i>	<i>MSc</i>	<i>PhD</i>
<b>5.1</b>	Teaching and Learning resources	Compliant	Compliant	Compliant
<b>5.2</b>	Physical resources	Compliant	Compliant	Compliant
<b>5.3</b>	Human support resources	Compliant	Compliant	Compliant
<b>5.4</b>	Student support	Compliant	Compliant	Compliant



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

### **Sub-areas**

- 6.1. Selection criteria and requirements**
- 6.2. Proposal and dissertation**
- 6.3. Supervision and committees**

### **6.1 Selection criteria and requirements**

#### **Standards**

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

### **6.2 Proposal and dissertation**

#### **Standards**

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

### 6.3 Supervision and committees

#### Standards

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

*You may also consider the following questions:*

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

#### Findings

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

The qualification examination does not seem to formally include a literature survey on the PhD topic to justify the set of objectives.

#### Strengths

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

Excellent facilities and international standing in selected areas.

#### Areas of improvement and recommendations

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

The outcome options of the PhD defence and subsequent actions are not specified and therefore should be revised.



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

Sub-areas		<i>Non-compliant/ Partially Compliant/Compliant</i>
6.1	Selection criteria and requirements	Partially compliant
6.2	Proposal and dissertation	Compliant
6.3	Supervision and committees	Compliant

## D. Conclusions and final remarks

*Please provide constructive conclusions and final remarks, which may form the basis upon which improvements of the quality of each programme of study under review may be achieved, with emphasis on the correspondence with the EQF.*

The EEC found that the academic personnel carry the skills necessary for good teaching and research. Recent investments in consolidating all available facilities and infrastructure within one campus is expected to give a major boost to the coherence of all the programmes under evaluation and will significantly improve student experience. In general, EEC found all the programmes under evaluation mostly compliant with regulations, while improvements at varying levels of importance are recommended to address specific partially compliant aspects.

Education quality assurance system exists at university level, and MME nominally adopts this. However, EEC could not find in the application and presentation materials coherent formalized procedures at MME level that regularly assess quality and continuously improve student experience in the courses. Formalized procedures for quality assurance at the department level should be elaborated and made publicly available. Some elements of procedures are stated in the application materials, but it remains unclear how the system actually works. For example, it is unclear how information flows from course evaluation forms to relevant committees and further acted on for improvement of failure and dropout rates. The committee also fully appreciates intolerance to plagiarism, but penalties in the form of social work appear non-compliant and outdated.

The BSc programme has consistent policies for admission. This programme fulfils all the requirements for professional registration with local authorities, ETEK. Students feel generally well supported by the department personnel, lecture halls and library. However, EEC could not find any quantitative criteria for admission to the MSc, MEng and PhD programmes. Nevertheless, the PhD programme is strong, attracting motivated students also from abroad. The qualification examination of the PhD programme does not seem to formally include a literature survey on the PhD topic to justify the set of objectives. The outcome options of the PhD defense and subsequent actions are not specified. The internal coherence of the masters programmes and their placement between the BSc and the PhD programmes need to be revised, particularly the balance of topics between compulsory and elective courses.



**E. Signatures of the EEC**

<i>Name</i>	<i>Signature</i>
<b>Pavlos Aleiferis</b>	
<b>Dmytro Orlov</b>	
<b>Dimitrios Kyritsis</b>	
<b>Iakovos Christodoulou</b>	
<b>Giorgos Georgiou</b>	

**Date:** 2024.03.02

