



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



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Accreditation Report for the New Undergraduate Study Programme in operation of:

Mechanical Engineering

Institution: International Hellenic University

Date: 11 February 2023



**Επιχειρησιακό Πρόγραμμα
Ανάπτυξη Ανθρώπινου Δυναμικού,
Εκπαίδευση και Διά Βίου Μάθηση**
Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης



Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation of **Mechanical Engineering** of the **International Hellenic University** for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new undergraduate study programme in operation of **Mechanical Engineering** of the **International Hellenic University** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Konstantinos Kontis,**
University of Glasgow, Glasgow, UK (**Chair**)
- 2. Prof. Konstantinos Salonitis**
Cranfield University, Cranfield, UK
- 3. Prof. Michael Kokkolaras**
McGill University, Montreal, Canada
- 4. Mr. Panagiotis Kiskiras**
Mechanical Engineer, Member of the Technical Chamber of Greece, Athens, Greece
- 5. Mr. Efthymios Kechagias**
Student, Department of Mechanical Engineering, University of West Macedonia, Kozani, Greece

II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) reviewed the material provided by the Hellenic Authority of Higher Education (HAHE) in advance of the evaluation week including documentation regarding the HAHE mission, standards and guidelines of Quality Accreditation (QA) of new undergraduate programmes in operation, and national framework of Higher Education Institutes (HEIs) including the Quality Measure Metrics. On 6th February 2023, the EEAP met in private to discuss the Department's proposal for the accreditation of the new Undergraduate Programme (UGP), allocate tasks and list issues for the virtual visit. The EEAP started the virtual visit at the International Hellenic University (IHU) on 06/02/2023. The first meeting was with the Vice-Rector/President of the Quality Assurance Unit / MODIP, and the Head of the Department of Mechanical Engineering for a short overview of its history, vision, mission, and academic profile. Further presentations provided helpful information about IHU's current status, strengths and possible areas of concern. In the virtual meeting with the (MODIP) and Internal Evaluation Groups (OMEA) representatives, the EEAP investigated the degree of compliance of the UGP to the Quality Standards for Accreditation. The EEAP received further documentation and supporting material to facilitate their decision for Quality Accreditation. In the evening, the EEAP met privately to reflect on the discussions and prepare for the second day of the visit.

On 07/02/2023, the program consisted of further meetings involving employers, social partners, teaching staff members, students, administrative staff, the MODIP and the OMEA representatives, the Vice-Rector, and the Head of the Department, including an on-line tour and discussion about the facilities:

- Meeting with the external stakeholders to better understand their relations with the Institution.
- Meeting with the teaching staff members to discuss professional development opportunities, mobility, workload, student evaluations; competence and adequacy of the teaching staff to ensure learning outcomes; the link between teaching and research; teaching staff's involvement in applied research, projects and research activities directly related to the programme; and possible areas of weakness.
- Meeting with the Undergraduate (UG) students to gain an insight into their study experience and campus facilities, and their input in quality control and decision making; discuss their priority issues concerning student life and welfare.
- On-line tour of the classrooms, lecture halls, libraries laboratories, and other facilities and discussion with administrative and teaching staff members about the facilities presented in the video produced for this purpose. This was an opportunity to evaluate facilities and learning resources to ascertain that the learning materials, equipment, and facilities are adequate for the successful provision of the programme.
- Meeting with the MODIP and the OMEA representatives to discuss several points and findings. The EEAP received further clarifications.
- A final meeting with the Vice-Rector/President of MODIP, the Head of the Department, and MODIP and OMEA representatives took place where the EEAP briefly presented their key findings.

During the day, the EEAP met in private several times to reflect on the discussions and start the preparation of the accreditation report following the procedures provided by HAHE.

III. New Undergraduate Study Programme in operation Profile

The Mechanical Engineering Department of the International Hellenic University was established as the succession of the respective department of the Technological Education Institution (ATEI) of Central Macedonia. The department was essentially founded in 1983 as part of the so-called newly established TEI of Serres.

The key milestones in its history include:

- 1983: founded as a TEI Department with a three-year study programme;
- 2013: integration into the newly established ATEI of Central Macedonia;
- 2019: integration into the International Hellenic University offering five-year study programs, and the introduction of a PhD program.

The Mechanical Engineering department occupies 6,260 square metres of facilities, including 7 lecture halls (able to host cumulatively 300 attendees), 2 auditoriums (able to host cumulatively 200 attendees), and 24 laboratory spaces. The total value of the assimilated laboratory equipment exceeds 7M Euros.

The Mechanical Engineering undergraduate study programme is a five-year integrated Master's programme whose development was based on the four-year respective programme offered by ATEI of Central Macedonia. The students of the 5-year program are required to complete a total of 49 courses (33 compulsory core courses delivered during the first 6 semesters, 8 compulsory direction courses during the 7th and 8th semesters, 2 direction elective courses and 6 specialization electives) along with the completion of the Diploma Thesis. The program has an equivalency of 300 ECTS (270 from the completion of the courses and 30 from the diploma thesis). In total, the department offers 91 courses to students. Currently, no practical training is required, although it is an optional element offered to the students and supported by the faculty.

Students are required to follow a specific study direction and specialisation during the last two years of study. The offered directions and specializations are:

- Manufacturing direction
 - Specialization of Mechanical Design and Materials
 - Specialization of Manufacturing and Production Technology
- Energy direction
 - Specialization of Thermo-Fluid Mechanics
 - Specialization of Power Generation and Management

The department has prepared a detailed Curriculum Guide to ensure that students understand the program. In addition, course syllabi for all courses taught are available on the web page of the Department (although only in the Greek language). Students are given the opportunity to evaluate the courses they attend, and their input is considered in adjusting course content and delivery aspects.

The first students entered the new undergraduate programme in September 2019 and the first graduates are expected to graduate in 2024. Currently, the department has 417 registered students in the new study programme.

There are currently 14 faculty members that support the educational and research activities of the program. To accomplish the educational requirements of the program, the Department

employs ten (10) additional adjunct part-time lecturers, who cover specific courses and provide the required lectures as well as one full-time tutor. The labs are supported by six (6) technicians, and the students are supported by one administrative staff.

The department's faculty has a reasonable number of publications and research activities, both in projects and funds. Graduates of the program currently are not allowed to become members of the Hellenic Technical Chamber (TEE), and as such, they lack engineering professional rights.

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit

Institutions must have developed an appropriate strategy for the establishment and operation of new academic units and the provision of new undergraduate study programmes. This strategy should be documented by specific feasibility and sustainability studies.

By decision of the institutional Senate, the Institutions should address in their strategy issues related to their academic structure in academic units and study programmes, which support the profile, the vision, the mission, and the strategic goal setting of the Institution, within a specific time frame. The strategy of the Institution should articulate the potential benefits, weaknesses, opportunities or risks from the operation of new academic units and study programmes, and plan all the necessary actions towards the achievement of their goals.

The strategy of their academic structure should be documented by specific feasibility and sustainability studies, especially for new academic units and new study programmes.

More specifically, the feasibility study of the new undergraduate study programmes should be accompanied by a four-year business plan to meet specific needs in infrastructure, services, human resources, procedures, financial resources, and management systems.

During the evaluation of the Institutions and their individual academic units in terms of meeting the criteria for the organisation of undergraduate study programmes, particular attention must be placed upon:

a. The academic profile and the mission of the academic unit

The profile and mission of the department should be specified. The scientific field of the department should be included in the internationally established scientific fields of Higher Education, as they are designated by the international categorisation of scientific fields in education, by UNESCO (ISCED 2013).

b. The strategy of the Institution for its academic development

The academic development strategy for the operation of the department and the new study programme should be set out. This strategy should result from the investigation of the factors that influence the studies and the research in the scientific field, the investigation of the institutional, economic, developmental, and social parameters that apply in the external environment of the Institution, as well as the possibilities and capabilities that exist within the internal environment (as reflected in a SWOT Analysis: strengths, weaknesses, opportunities, and threats). This specific analysis should demonstrate the reason for selecting the scientific field of the new department.

c. The documentation of the feasibility of the operation of the department and the study programme

The feasibility of the operation of the new department should be justified based on:

- *the needs of the national and regional economy (economic sectors, employment, supply-demand, expected academic and professional qualifications)*
- *comparison with other national and international study programmes of the same scientific field*
- *the state-of-the-art developments*

- *the existing academic map; the differentiation of the proposed department from the already existing ones needs to be analysed, in addition to the implications of the current image of the academic map in the specific scientific field.*

d. The documentation of the sustainability of the new department

Mention must be made to the infrastructure, human resources, funding perspective, services, and all other available resources in terms of:

- *educational and research facilities (buildings, rooms, laboratories, equipment, etc.)*
- *staff (existing and new, by category, specialty, rank and laboratory). A distinct five-year plan is required, documenting the commitment of the School and of the Institution for filling in the necessary faculty positions to cover at least the entire pre-defined core curriculum*
- *funding (funding possibility from public or non-public sources)*
- *services (central, departmental / student support, digital, administrative, etc.)*

e. The structure of studies

The structure of the studies should be briefly presented, namely:

- **The organisation of studies:** *The courses and the categories to which they belong; the distribution of the courses into semesters; the alignment of the courses with the European Credit Transfer System (ECTS).*
- **Learning process:** *Documentation must be provided as to how the student-centered approach is ensured (modes of teaching and evaluation of students beyond the traditional methods).*
- **Learning outcomes:** *Knowledge, skills and competences acquired by graduates, as well as the professional rights awarded must be mentioned.*

f. The number of admitted students

- *The proposed number of admitted students over a five-year period should be specified.*
- *Any similar departments in other HEIs with the possibility of student transfers from / to the proposed department should be mentioned.*

g. Postgraduate studies and research

- *It is necessary to indicate research priorities in the scientific field, the opportunities for interdisciplinary research, the challenges towards new knowledge, possible research collaborations, etc.*
- *In addition, the postgraduate and doctoral programmes offered by the academic unit, the research projects performed, and the research performance of the faculty members should be mentioned.*

Relevant documentation

- *Introductory Report by the Quality Assurance Unit (QAU) addressing the above points with the necessary documentation*
- *Updated Strategic Plan of the Institution that will include its proposed academic reconstruction, in view of the planned operation of new department(s) (incl. updated SWOT analysis at institutional level)*
- *Feasibility and sustainability studies for the establishment and operation of the new academic unit and the new study programme*
- *Four-year business plan*

Study Programme Compliance

The academic profile and the mission of the academic unit

The Department of Mechanical Engineering Department was founded in 1983 and joined IHU in 2019, according to Law 4610/2019. The Department of Mechanical Engineering remains firmly oriented to the following principles: Cultivate and promote knowledge, and contribute to the development of the science of Mechanical Engineering; Provide its students with all the necessary supplies that will ensure the best possible training for a successful academic and/or professional career; Contribute to the development & progress of the industrial fabric of the country, developing innovative ideas, through the application of scientific and technological knowledge; and Disseminate new scientific knowledge, through collaborations with other Universities and Research Centers at home and abroad, as well as with professional, scientific and technical bodies in Greece and abroad.

The strategy of the Institution for its academic development

The strategic planning of the Department of Mechanical Engineering of DIPAE concerns the assurance of the quality of the studies and the services provided to the students, the productive units of the country, and the local & wider society. In this regard, the Department has a series of credible actions to fulfil the following objectives: 1. Awarding a single and indivisible postgraduate degree (integrated master) to the graduates of the Department. 2. Correspondence of the Department with those of the Polytechnic Schools and attribution of the relevant professional rights to its graduates. 3. Attracting high-level students. 4. Attracting high-level teaching staff. 5. Increasing the Department's research activity and linking it with production. 6. Interconnection of the educational activity of the Department with the labour market. 7. Further dissemination of the scientific knowledge produced by the Department.

The documentation of the feasibility of the operation of the department and the study programme

The operational plan is feasible aiming for a strong, sustainable and internationally competitive Department and study programme, covering a wide range of basic and applied fields of modern Mechanical Engineering. It aspires to create the scientific potential of high-level education, for the staffing of both research and the provision of services in sectors that are drivers for economic development. It provides students with the necessary theoretical & technological training. It creates synergies with the other related Departments of Mechanical Engineering and the corresponding Research Laboratories based in the Regions of Central Macedonia and Eastern Macedonia & Thrace. It supports industrial enterprises and administrative services of the Regions of Central Macedonia and Eastern Macedonia & Thrace, to strengthen the innovative actions of the industry, and the utilization & promotion of Greek products. Compared to relevant study programmes of the other Greek Institutions, as well as corresponding European Institutions, the 5-year Study Program of the Department of Mechanical Engineering is completely compatible.

The documentation of the sustainability of the new department

To cover its educational and research activities, the Mechanical Engineering Department has 7 classrooms, with a total capacity of 350 people, 2 auditoriums, with a total capacity of 200 people, and 16 exclusive-use, fully equipped laboratory rooms, with a total capacity of 350 people. The total area of its facilities is 6,250 sqm, while the value of the Department's installed laboratory equipment exceeds €7,300,000. The equipment of the Mechanical Engineering Department of DIPAE is constantly renewed and modernized. The SWOT analysis is credible and realistic.

The Department of Mechanical Engineering has three established research laboratories, which are the core of conducting research activities and innovative actions. The laboratories, in addition to strengthening the Department's extroversion, are one of its main sources of funding from external (i.e., other than the Ministry of Health) bodies, such as, for example, industrial and craft companies, local authorities, Prefectures, etc. Another large part of the Department's funding from external bodies comes from national and foreign research programs.

The staff of the Department of Mechanical Engineering consists of 14 faculty members of all levels, of which 13 are PhD holders. Their work is supported by one (1) Emeritus Professor and 6 ETP members, 3 of whom hold a Master's Degree. Finally, one (1) member of the Administrative Staff serves in the Department's Secretariat. It is worth noting that 12 of the 15 members (that is, 80%) of the permanent educational staff of the Mechanical Engineering Department of DIPAE hold a basic degree in Engineering.

The ratio of active students per faculty member is 106/1, and the ratio per ETEP member is 265/1. The administrative secretary manages 1575 active students plus all the other contractual obligations of the Department. The increase in the number of faculty members is paramount, so that, in a 4-year horizon, the staff-to-student ratio approaches the average of Greek Universities, i.e. 1/40. Also, in a 4-year horizon, hiring one member of the Administrative Staff and four ETEP members is necessary to ensure the high quality of the provided educational work and services to the students.

The structure of studies

The curriculum fully covers the academic subject of the science of Mechanical Engineering which concerns the study, design, development, construction & operation of machines and facilities, as well as production & energy management systems. The primary objective of the programme is to offer academic education with application in the labour market. It is equally divided between the development of a solid theoretical background and the acquisition of technical skills through the training of students in well-equipped laboratories, thus strengthening the necessary connection between academic knowledge and technological application. The curriculum structure is based on four streams and their distribution in the curriculum is appropriate. The curriculum allows students to prepare for an internship in the profession, which is optional. It can last from two to four months. It is conducted during the 9th and/or 10th semester of studies following the collection of 240 Credit Units (ECTS).

A continuous evaluation of the learning results is performed in parallel with the learning process. Learning outcomes are assessed based on students' ability to apply the knowledge they acquire, to design and carry out experiments, data analysis and presentation, to work individually and in groups, to understand and apply modern techniques, skills and tools, to understand the professional and ethical responsibility of the engineer and the impact of the scientific solutions proposed on the social environment. Each course clearly describes the learning objectives and how they relate to the learning outcomes and analyses how to adapt teaching techniques and student assessment techniques. The student's grade is determined based on the written or oral exams and/or presentations of individual or group assignments and/or laboratory exercises, to evaluate the entire range of knowledge, skills and abilities acquired by students.

Graduates can be employed professionally in all sectors of the relevant scientific fields. However, it is still unclear what the exact professional rights of the graduates will be. The Department intends to submit an application for the correspondence of the UGP with those of the Polytechnic Schools and the granting of the relevant professional rights to the graduates.

The number of admitted students

Undergraduate students are admitted to the Mechanical Engineering Department of DIPAE after national entrance exams. A small percentage of students come from transfers, qualifying exams or other categories (e.g., foreign students, winners in international student competitions, etc.). The number of annual admissions to the Department of Mechanical Engineering of DIPAE is defined each time by the applicable policies. During the academic years of its operation, i.e., 2019-20, 2020-21, and 2021-22, the number of admitted students was 102, 124 and 109 respectively. Regarding the desired distribution of the number of admitted students in the depth of the next 5 years, given the anticipated staff redeployment due to the retirement of teaching members of staff, it is the region 90 to 110.

Postgraduate studies

Since 2013, there is a three (3) semester (90 ECTS) Master's Programme entitled "Renewable energy utilization systems". Graduates of local Universities and/or affiliated Institutions abroad with relevant backgrounds are accepted at the programme. The number of admitted postgraduate students is twenty (20) people, per year. Doctoral Studies in the Mechanical Engineering Department of DIPAE aim to advance knowledge through the production of original, comprehensive scientific research and lead to the acquisition of a Doctoral Degree. The duration for obtaining the Doctoral Degree is at least 3 full calendar years from the date of appointment of the Three-Member Advisory Committee, while the corresponding maximum period is 6 years. The faculty members of the Department of Mechanical Engineering are research active as it is evidenced by the provided documentation.

The Department of Mechanical Engineering has developed close cooperation ties with various local industries. In the context of research and other programs, the Mechanical Engineering Department has developed close cooperation with 9 Universities and Research Centers in Greece and 9 corresponding Institutions abroad. The Department has participated in Summer Schools, international robotics and racing competitions.

In conclusion, the EEAP has determined that the strategic planning, feasibility and sustainability of the academic unit are fully compliant.

Panel Judgement

Principle 1: Strategic planning, feasibility and sustainability of the academic unit	
a. The academic profile and the mission of the academic unit	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
b. The strategy of the Institution for its academic development	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
c. The documentation of the feasibility of the operation of the department and the study programme	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
d. The documentation of the sustainability of the new department	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
e. The structure of studies	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
f. The number of admitted students	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
g. Postgraduate studies	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Principle 1: Strategic planning, feasibility and sustainability of the academic unit (overall)	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Strive for continuous improvements.

Principle 2: Quality Assurance Policy of the Institution and the Academic Unit

The Institution should have in place an accredited Internal Quality Assurance System, and should formulate and apply a Quality Assurance Policy, which is part of its strategy, specialises in the operation of the new academic units and the new study programmes, and is accompanied by annual quality assurance goals for the continuous development and improvement of the academic units and the study programmes.

The quality assurance policy of the Institution must be formulated in the form of a published statement, which is implemented by all stakeholders. It focuses on the achievement of special annual quality goals related to the quality assurance of the new study programme offered by the academic unit. In order to implement this policy, the Institution, among others, commits itself to put into practice quality procedures that will demonstrate: the adequacy and quality of the academic unit's resources; the suitability of the structure and organisation of the curriculum; the appropriateness of the qualifications of the teaching staff; the quality of support services of the academic unit and its staffing with appropriate administrative personnel. The Institution also commits itself to conduct an annual internal evaluation of the new undergraduate programme (UGP), realised by the Internal Evaluation Group (IEG) in collaboration with the Quality Assurance Unit (QAU) of the Institution.

The quality assurance policy of the academic unit includes its commitment to implement quality procedures that will demonstrate: a) the adequacy of the structure and organisation of the curriculum, b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education, c) the promotion of the quality and effectiveness of the teaching work, d) the adequacy of the qualifications of the teaching staff, e) the promotion of the quality and quantity of the research work of the members of the academic unit, f) the ways of linking teaching with research, g) the level of demand for graduates' qualifications in the labour market, h) the quality of support services, such as administration, libraries and student care, i) the implementation of an annual review and audit of the quality assurance system of the UGP through the cooperation of the Internal Evaluation Group (IEG) with the Quality Assurance Unit (QAU) of the Institution.

Relevant documentation

- *Revised Quality Assurance Policy of the Institution*
- *Quality Assurance Policy of the academic unit*
- *Quality target setting of the Institution and the academic unit (utilising the S.M.A.R.T. methodology)*

Study Programme Compliance

The MODIP of IHU (DIPAE) is responsible for ensuring and continuously improving the quality of the educational and research work of DIPAE, as well as for ensuring the quality related to the effective operation and performance of its services, in accordance with international practices, especially those of the European Higher Education Area, and the principles & directions of the HAHE. MODIP is the central coordinating body for all quality assurance and evaluation procedures of the University.

The quality policy of MENG/IHU is harmonized with the QA policy of IHU and KPIs. The Department strives to provide academic excellence through its Curriculum, offering high-quality theoretical and applied education, and enhancing students' abilities, skills and critical thinking along with cultivating their technological skills. The Department is committed to

complying with the requirements and continuously improving the effectiveness of its quality control procedures. In addition, the Department of Mechanical Engineering, through the dissemination of information on its website, attempts to communicate as effectively as possible the Quality Policy of IHU.

Despite the current challenges in terms of reduced numbers of teaching staff, an emphasis is placed on extroversion and internationalization with a continuous improvement of the curriculum, infrastructure, functions and services provision, in order to adapt to the current and future academic ambitions, research directions and national needs. The quality policy of the Department specifies its strategic objectives. It aims at achieving the quality objectives, which concern its operation in general and the organisation and operation of the Undergraduate Programme.

OMEA in collaboration with MODIP, plans and suggests to the Department the appropriate actions and the ways through which the objectives can be achieved. The implementation of the quality policy and the achievement of the quality objectives support the evolution of the academic culture and ambitions and the direction of the Department and its Undergraduate Programme. These are made possible thanks to the departmental staff's high level and dedication and students' active participation in its activities.

OMEA meets regularly, utilizing the assistance of all services and committees of the Department and at the same time cooperates closely with MODIP. The quality objectives, which are part of the quality policy of the Undergraduate Programme, are specified and quantified with specific indicators, where the current values and target values are also recorded together with the respective actions and plans, and the responsible bodies of the Department. The target values are taking into consideration the trends allowing in most cases for improvement. OMEA conducts an internal evaluation, having collected and processed the data and other information on all issues related to the operation and targets of the Department and the Undergraduate Programme. The results of the annual internal evaluation are presented at the general assembly of the Department, where any corrective interventions and improvement actions are decided. The quality policy and quality objectives are publicly posted and available on the official website of MENG/IHU.

In conclusion, the EEAP has determined that the quality assurance policy of the Institution and the academic unit are fully compliant.

Panel Judgement

Principle 2: Quality assurance policy of the Institution and the academic unit	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Strive for continuous improvements.

Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes

Institutions should design the new undergraduate programmes following a defined written process, which will involve the participants, information sources and the approval committees for the programme. The objectives, the expected learning outcomes, the intended professional qualifications and the ways to achieve them are set out in the programme design. The above details, as well as information on the programme's structure, are published in the Student Guide.

The Institutions develop their new undergraduate study programmes, following a well-defined procedure. The academic profile, the identity and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the European and National Qualifications Framework for Higher Education are described at this stage. An important new element in the structure of the programmes is the introduction of courses for the acquisition of digital skills. The above components should be taken into consideration and constitute the subject of the programme design, which, among other things, should include: elements of the Institution's strategy, labour market data and employment prospects of graduates, smooth progression of students throughout the stages of the programme, the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS), the option of providing work experience to the students, the linking of teaching and research, the international experience in study programmes of similar disciplines, the relevant regulatory framework, and the official procedure for the approval of the programme by the Institution.

The procedure of approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Quality Assurance Unit (QAU).

Relevant documentation

- *Senate decision for the establishment of the UGP*
- *Curriculum structure: courses, course categories (including courses for the acquisition of digital skills), ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities.*
- *Labour market data regarding the employment of graduates, international experience in a related scientific field.*
- *Student Guide*
- *Course outlines*
- *Teaching staff (list of areas of specialisation, its relation to the courses taught, employment relationship)*
- *QAU minutes for the internal evaluation of the new study programme and its compliance with the Standards*

Study Programme Compliance

During the design process of the new 5-year UGP, the Department takes into consideration the study programs of similar Polytechnic Schools, the opinion of stakeholders from industry and graduates from the previous 4-year UGP. At its core, the UGP is designed to provide equally a theoretical background and technical skills.

The structure of the UGP follows the logic of other Mechanical Engineering UGPs. It offers a range of background, core, compulsory major courses and electives. The course sequence, alongside other information necessary for the students, is clearly presented in the Study Guide.

The Department has a special committee that oversees the reform of the UGP. The committee collects information from the evaluations made by the students at the end of each semester, and developments in the labour market and other sources, and then proposes changes. These changes are approved by the Department Assembly and introduced into the UGP. This procedure takes place every 4 years, in accordance with the pertinent legislation.

The UGP offers several courses to strengthen the digital skills of the students. After graduating, the students get a digital skills certificate, provided by the Department and recognized by the state.

Panel Judgement

Principle 3: Design, approval and monitoring of the quality of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

There are no specific recommendations.

Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students

The academic unit should ensure that the new undergraduate programmes are delivered in a way that encourages students to take an active role in creating the learning process. The assessment methods should reflect this approach.

In the implementation of student-centered learning and teaching, the academic unit:

- ✓ *respects and attends to the diversity of students and their needs, enabling flexible learning paths*
- ✓ *considers and uses different modes of delivery where appropriate*
- ✓ *flexibly uses a variety of pedagogical methods*
- ✓ *regularly evaluates and adjusts the modes of delivery and application of pedagogical methods aiming at improvement*
- ✓ *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys*
- ✓ *reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff*
- ✓ *promotes mutual respect in the student-teacher relationship*
- ✓ *applies appropriate procedures for dealing with students' complaints*

Relevant documentation

- *Questionnaires for assessment by the students*
- *Regulation for dealing with students' complaints and appeals*
- *Regulation for the function of the academic advisor*
- *Reference to the planned teaching modes and assessment methods*

Study Programme Compliance

The EEAP was able to evidence teaching staff commitment to student-centred learning, teaching, and assessment. The accreditation proposal submitted by the department outlines the breadth of teaching methods employed by the teaching staff, including open lectures, lab and tutoring exercises, software-assisted teaching, and group projects to name a few. Furthermore, the EEAP during the interviews was convinced that these teaching practices are embraced by all teaching staff. However, there is not an established (university-level) support unit for training and upskilling academics' teaching skills.

The quality of teaching sessions and material and the commitment of the teaching staff to their learning was praised by the interviewed students. Students have the opportunity at the end of each semester to provide feedback both on the teaching material and content as well as the efficiency and efficacy of the teaching methods employed by the teaching staff. The electronic surveys used for this reason are extensive allowing for collecting a plethora of interesting and insightful data. However, the percentage of students completing these surveys is low. The EEAP was not able to judge how the feedback is analysed and implemented and whether the students receive notification of changes introduced because of their feedback.

The relationships established between the students and the teaching staff are characterised as excellent. During the interviews, it was clear to the EEAP that students feel close to the

teaching staff, and have several ways of contacting them, either via physical or electronic means.

The EEAP determined that the students are aware of grade components and assessment methods for each class as those are published in advance (being part of the study guide offered to them at the beginning of their studies) and are included in the syllabus, but also usually discussed in the first lectures of the semester.

The EEAP found that the Department facilitates the development of individual skills by all students. The development of the so-called “soft skills” (including group and team working, communication, presentation and leadership skills) is facilitated as part of many courses and lab exercises.

The department has an established formal process for student appeals and complaints. Interviewed students were aware of the process and suggested that all complaints are considered and resolved within the Department.

All students are assigned an academic advisor when they start their studies at the university. The academic advisor supports the students in their transition to tertiary education, informally monitors the student’s progress and advises the students on potential paths after they conclude their studies.

In conclusion, the EEAP has determined that the new undergraduate program in the Department is student-centred, and cultivates healthy relationships between the students, the faculty, and the administrative staff.

Panel Judgement

Principle 4: Student-centred approach in learning, teaching and assessment of students	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Introduce further chances for soft-skills development. Embed such soft-skills development activities into the intended learning outcomes of the courses, making sure that these are balanced across the courses.
- Increase the number of hands-on practical exercises offered to the students, taking advantage of the available laboratory equipment and assets.
- Introduce a series of seminars to be delivered by external lecturers/industry representatives on the profession of mechanical engineering and the latest developments.
- Establish (probably at the university level) a support unit for training and upskilling academics’ teaching skills.

Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes

Academic units should develop and apply published regulations addressing all aspects and phases of studies of the programme (admission, progression, recognition and degree award).

All the issues from the beginning to the end of studies should be governed by the internal regulations of the academic units. Indicatively:

- ✓ *the registration procedure of the admitted students and the necessary documents - according to the law - and the support of the newly admitted students*
- ✓ *student rights and obligations, and monitoring of student progression*
- ✓ *internship issues, granting of scholarships*
- ✓ *the procedures and terms for writing the thesis (diploma or degree)*
- ✓ *the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and assurance of the progress of students in their studies*

as well as

- ✓ *the terms and conditions for enhancing student mobility*

Appropriate recognition procedures rely on relevant academic practice for recognition of credits among various European academic departments and Institutions in line with the principles of the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region. Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes, and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

All the above must be made public within the context of the Student Guide.

Relevant documentation

- *Internal regulation for the operation of the new study programme*
- *Regulation of studies, internship, mobility and student assignments*
- *Printed Diploma Supplement*

Certificate from the President of the academic unit that the diploma supplement is awarded to all graduates without exception together with the degree or the certificate of completion of studies

Study Programme Compliance

Admissions to Greek university departments are regulated by the relevant national legislation. Admission to the department requires successful completion of entrance exams that are set, regulated and marked centrally by the Ministry of Education. The department welcomes the students during their first week, with the Chair of the department organising an orientation event for all new students each year. The programme study guide is handed to all students including detailed information about the goals and structure of the programme, the syllabi of

each course and the requirements for completing each one. The students are appointed an advisor who is a teaching staff member.

Progress in studies is achieved through successfully sitting exam papers, laboratory reports, quizzes, and assigned projects. However, student progress is not systematically monitored and reviewed. This is achieved informally through the relationship established between the advisor and the student, although this relationship and the frequency of the meetings are student-led.

Graduates are issued the Mechanical Engineering diploma in Greek, and award certificates in both Greek and English, including an academic transcript which lists their achievements in detail.

The program follows the ECTS credit system which is applied across the course curriculum and supports the students' recognition and certification, as well as facilitates their possible mobility.

Students are encouraged to take advantage of student mobility opportunities through the Erasmus+ programme. However, the panel was not able to assess the degree of uptake of such opportunities by the students.

The EEAP is confident that the Department has developed, published, and is fully committed to managing, administering, and applying all regulations that pertain to all aspects of students' admission, progression, recognition, and degree award.

Panel Judgement

Principle 5: Student admission, progression, recognition of academic qualifications, and award of degrees and certificates of competence of the new study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Establish a formal student progress monitoring process.
- Encourage students to take advantage of the ERASMUS mobility programme.
- Further engage with local industry for offering opportunities for practical training to the students.

Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes

Institutions should assure themselves of the competence, the level of knowledge and skills of the teaching staff of the academic units, and apply fair and transparent processes for their recruitment, training and further development.

The Institution should attend to the adequacy of the teaching staff of the academic unit, the appropriate staff-student ratio, the suitable categories of staff, the appropriate subject areas and specialisations, the fair and objective recruitment process, the high research performance, the training – development, the staff development policy (including participation in mobility schemes, conferences and educational leaves- as mandated by law).

More specifically, the academic unit should set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognise the importance of teaching and research; offer opportunities and promote the professional development of the teaching staff; encourage scholarly activity to strengthen the link between education and research; encourage innovation in teaching methods and the use of new technologies; promote the increase of the volume and quality of the research output within the academic unit; follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

Relevant documentation

- *Procedures and criteria for teaching staff recruitment*
- *Regulations or employment contracts, and obligations of the teaching staff*
- *Policy for staff recruitment, support and development*
- *Performance of the teaching staff in scientific-research and teaching work, also based on internationally recognised systems of scientific evaluation (e.g., Google Scholar, Scopus, etc.)*

Study Programme Compliance

The Department currently has 14 faculty members and is supported by 1 Emeritus Professor and 6 Technical (ETEP) members. Twelve of those faculty members hold a basic degree in Engineering. The teaching work is further supported by 8 temporary teaching members, who are contributing decisively to the smooth operation of the new UGP.

The small number of faculty members leads to several problems, mostly related to a limitation of mobility and an increased workload of the teaching members of staff. Although the legislated maximum allowed is 6 hours of teaching per week, the current teaching load is at least 8 hours, which can go up to 10 or 12 hours a week. Despite this, the professors are enthusiastically devoted to their work, as indicated by the students, which is also evident from their high level of research work. Research is linked with teaching through elective courses in the later semesters and mainly during the preparation of the diploma thesis. Although the Department has a strong researching background, it does not seem to have institutionalized a research strategy that focuses on specific areas of science.

The recruitment and development of teaching staff are done in accordance with Greek legislation. The Department prequalifies the positions, the announcement is uploaded to the APELLA system, an electoral body formed from the registers of internal and external evaluators and the selection is made based on the relevance of the candidates' academic subject and that of the position. For the development of the permanent staff, the evaluations of the students are considered. Students evaluate the teaching members of staff and the course taught at the end of each semester and the results are collected by OMEA for further processing.

Panel Judgement

Principle 6: Ensuring the competence and high quality of the teaching staff of the new undergraduate study programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- Recruit more faculty members.
- Establish a clear research strategy, emphasizing cutting-edge areas.

Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes

Institutions should have adequate funding to meet the needs for the operation of the academic unit and the new study programme as well as the means to cover all their teaching and learning needs. They should -on the one hand- provide satisfactory infrastructure and services for learning and student support and -on the other hand- facilitate direct access to them by establishing internal rules to this end (e.g., lecture rooms, laboratories, libraries, networks, boarding, career and social policy services, etc.).

Institutions and their academic units must have sufficient resources, on a planned and long-term basis, to support learning and academic activity in general, in order to offer students the best possible level of studies. The above means include facilities such as, the necessary general and specific libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, information and communication services, support and counselling services. When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed students, students with disabilities), in addition to the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. Students should be informed about all available services. In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.

Relevant documentation

- *Detailed description of the infrastructure and services made available by the Institution to the academic unit to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding specific commitment of the Institution to financially cover these infrastructure-services from state or other resources*
- *Administrative support staff of the new undergraduate programme (job descriptions, qualifications and responsibilities)*
- *Informative / promotional material given to students with reference to the available services*

Study Programme Compliance

The Department receives its funding and means for undergraduate teaching from the Greek State to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means also include facilities like the library, study rooms, educational and scientific equipment, information and communications services, student support and counselling services.

The allocation of the available resources considers the needs of all undergraduate students and the shift towards student-centred learning and the adoption of flexible models of learning and teaching. IQAS ensures that all resources are appropriate, adequate, and accessible and that students are informed about the services available to them.

The role of support and administrative staff is crucial in delivering services and therefore they need to be qualified and have opportunities to develop their competencies. The Department has the necessary facilities (classrooms, laboratories) to ensure an appropriate teaching and learning environment.

There is an adequate range of support services available to the students. The students are informed about the available services and these services are functional and accessed by the students, although there is always room for further and continuous improvement on this matter.

EEAP noted also that the input from external stakeholders could be improved in order to increase the effectiveness of the practical training and assist the students with their career development and aspirations.

Panel Judgement

Principle 7: Learning resources and student support of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Improve the student-to-staff ratio by increasing staff and teaching resources.
- Institute an advisory board that includes all stakeholders such as external academics, representatives of public and private sectors, research institutes, and alumni.

Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes

The Institutions and their academic units bear full responsibility for collecting, analysing and using information, aimed at the efficient management of undergraduate programmes of study and related activities, in an integrated, effective and easily accessible way.

Effective procedures for collecting and analysing information on the operation of Institutions, academic units and study programmes feed data into the internal quality assurance system. The following data is of interest: key performance indicators for the student body profile, student progression, success and drop-out rates, student satisfaction with the programme, availability of learning resources and student support. The completion of the fields of National Information System for Quality Assurance in Higher Education (NISQA) should be correct and complete with the exception of the fields that concern graduates in which a null value is registered.

Relevant documentation

- *Report from the National Information System for Quality Assurance in Higher Education (NISQA) at the level of the Institution, the department and the new UGP*
- *Operation of an information management system for the collection of administrative data for the implementation of the programme (Students' Record)*
- *Other tools and procedures designed to collect data on the academic and administrative functions of the academic unit and the study programme*

Study Programme Compliance

The Department had established and operates an information system for the management and monitoring of data concerning students, academic staff, module structure and organization, teaching and provision of services to students as well as to the academic community.

It appears that there are procedures for collecting and analysing information on study programmes and other activities, feeding data into the internal system of QA, as evidenced by information that was also provided including aspects like KPIs, student population profile, student satisfaction with their programme(s), availability of learning resources and student support and career paths of graduates. Some are working well, and some require improvements for example tracking the career paths of graduates that require development at the departmental level.

Several methods are used for collecting information and further effort is required to ensure that both students and staff are involved in providing and analysing information and planning the follow-up activities.

Online information systems and other feedback forms are used for the collection of data. The student and staff satisfaction surveys are conducted annually.

More detailed data relevant to the analysis and evaluation of data related to the availability and accessibility of resources (equipment, social services etc.) were not provided.

Panel Judgement

Principle 8: Collection, analysis and use of information for the organisation and operation of new undergraduate programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

Clarify further the internal evaluation process, aiming at the participation of more students.

Principle 9: Public Information Concerning the New Undergraduate Programmes

Institutions and academic units should publish information about their teaching and academic activities in a direct and readily accessible way. The relevant information should be up-to-date, clear and objective.

Information on the Institutions' activities is useful for prospective and current students, graduates, other stakeholders and the public. Therefore, Institutions and their academic units must provide information about their activities, including the new undergraduate programmes they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students. Information is also provided, to the extent possible, on graduate employment perspectives.

Relevant documentation

- *Dedicated segment on the website of the department for the promotion of the new study programme*
- *Bilingual version of the website of the academic unit with complete, clear and objective information*
- *Provision for website maintenance and updating*

Study Programme Compliance

Due to the integration of the former TEI into the International Hellenic University (IHU), there are currently two websites for the Department of Mechanical Engineering: a legacy one and a new one. The new website is very effective: it has a simple structure that is easy to navigate and provides all the necessary information for prospective and current students, graduates, other stakeholders, and the public. Although the same can be said for all the information that should be provided by the department regarding its academic mission, the EEAP focuses on the information relevant to its teaching and academic activities (curriculum, study guide, schedule, exams, faculty bios, course evaluations, internship, mobility, and other opportunities, etc.). This information is up-to-date, clear, and easy to locate. It is worth noticing that there are clear instructions for students of the out-phasing Technology Institute program who are interested to integrate into the current university program. The information is also organized very well, e.g., according to degrees offered (undergraduate and graduate).

The new website does not currently have a full mirror in English. The current version, it includes only a tab where only basic essential information, including the undergraduate and graduate curricula, is offered. The EEAP was verbally informed that a full mirror site in English is not only planned but is in the implementation phase (its creation is externally contracted) and should be available within the next 3 months or so. The contractor is also responsible for maintenance and updates.

It should also be noted that although listed under the relevant list on the parent website of the IHU, there is no active link to the Department's website.

In conclusion, the department's teaching and academic activities are presented in a very clear, well-organized, and up-to-date manner. The content is all there, it just has to be translated and made available exactly in the same manner in English.

Panel Judgement

Principle 9: Public information concerning the new undergraduate programmes	
Fully compliant	
Substantially compliant	
Partially compliant	X
Non-compliant	

Panel Recommendations

- The full website in English should be accessible as soon as possible.
- The legacy website should be deactivated as soon as possible because it causes confusion and may mislead interested audiences.
- The Department should request that the link to its website is activated on IHU's website.

Principle 10: Periodic Internal Review of the New Study Programmes

Institutions and academic units should have in place an internal quality assurance system, for the audit and annual internal review of their new programmes, so as to achieve the objectives set for them, through monitoring and amendments, with a view to continuous improvement. Any actions taken in the above context, should be communicated to all parties concerned.

Regular monitoring, review and revision of the new study programmes aim at maintaining the level of educational provision and creating a supportive and effective learning environment for students. The above comprise the evaluation of: the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date; the changing needs of society; the students' workload, progression and completion; the effectiveness of the procedures for the assessment of students; the students' expectations, needs and satisfaction in relation to the programme; the learning environment, support services, and their fitness for purpose for the programme. Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date.

Relevant documentation

- Procedure for the re-evaluation, redefinition and updating of the curriculum
- Procedure for mitigating weaknesses and upgrading the structure of the UGP and the learning process
- Feedback processes on strategy implementation and quality targeting of the new UGP and relevant decision-making processes (students, external stakeholders)
- Results of the annual internal evaluation of the study programme by the QAU and the relevant minutes

Study Programme Compliance

The clearly articulated quality policy of the Department, in conjunction with the quality assurance regulations and the implemented system, ensures more than adequately periodic internal reviews of study programs and curricula by clear prescription and description of the relevant procedures for continuous evaluation and revision of the undergraduate and graduate curricula as well as for identifying threats and weaknesses and developing associated mitigation action plans. Besides the annual evaluation conducted by the OMEA, the curriculum and study programs are discussed at the general assembly regularly where possible issues can be identified by students and external stakeholders. It is commendable that the reports of the annual internal evaluations are publicly available on the Departmental websites. This promotes transparency and reflects the Department's commitment to continuous improvement.

It is important to consider that the curricula and study programs are relatively new since they were revised 5 years ago when the Department was integrated into the IHU. Nevertheless, it is evident to the EEAP, both by the relevant documents provided in the accreditation file and the interviews with the faculty, staff, students, and external stakeholders, that the study programs, curricula, teaching conditions, workload, services (such as the library), and facilities are monitored more than adequately so they can be revised, updated, and improved as necessary.

Panel Judgement

Principle 10: Periodic internal review of the new study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None.

Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes

The new undergraduate study programmes should regularly undergo evaluation by panels of external experts set by HAHE, aiming at accreditation. The results of the external evaluation and accreditation are used for the continuous improvement of the Institutions, academic units and study programmes. The term of validity of the accreditation is determined by HAHE.

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure and implemented by a panel of independent experts. HAHE grants accreditation of programmes, based on the Reports submitted by the panels, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the Standards, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees. Both academic units and institutions must consistently consider the conclusions and the recommendations submitted by the panels of experts for the continuous improvement of the programme.

Relevant documentation

- *Progress report on the results from the utilisation of the recommendations of the external evaluation of the Institution and of the IQAS Accreditation Report.*

Study Programme Compliance

The Department (in its former structure) was evaluated by an external panel in 2012. The report of the external evaluation panel was overall very positive. The suggestions of the external evaluators were taken under careful consideration by the Department, which prepared a comprehensive report that addressed in detail all the suggestions and included either clear action plans about implementing them or satisfactory arguments of why they cannot be adopted. This report reflected the fact that the Department takes external evaluations very seriously. This is also reflected by the quality of the accreditation file submitted to the EEAP.

The Department's IQAS was reviewed and accredited in 2021. Once again, the Department prepared an extensive report that addressed every single comment and suggestion of the accreditation panel. Moreover, the external evaluation and IQAS accreditation reports are available on the department's website, which contributes to a culture of receiving and capitalizing on constructive criticism. In conclusion, the department clearly complies with this principle.

Panel Judgement

Principle 11: Regular external evaluation and accreditation of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None.

Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones

Institutions and academic units apply procedures for the transition from previously existing undergraduate study programmes to new ones, in order to ensure compliance with the requirements of the Standards.

Applies in cases where the department implements, in addition to the new UGPs, any pre-existing UGPs from departments of former Technological Educational Institutions (TEI) or from departments that were merged / renamed / abolished.

Institutions should implement procedures for the transition from former UGPs to new ones, in order to ensure their compliance with the requirements of the Standards. More specifically, the institution and the academic unit must have a) the necessary learning resources, b) appropriate teaching staff, c) structured curriculum (courses, ECTS, learning outcomes), d) study regulations, award of diploma and diploma supplement, and e) system of data collection and use, with particular reference to the data of the graduates of the pre-existing UGP. In this context, the Institutions and the academic units prepare a plan for the foreseen transition period of the existing UGP until its completion, the costs caused to the Institution by its operation as well as possible measures and proposals for its smooth delivery and termination. This planning includes data on the transition and subsequent progression of students in the respective new UGP of the academic unit, as well as the specific graduation forecast for students enrolled under the previous status.

Relevant documentation

- *The planning of the Institution for the foreseen transition period, the operating costs and the specific measures or proposals for the smooth implementation and completion of the programme*
- *The study regulations, template for the degree and the diploma supplement*
- *Name list of teaching staff, status, subject and the course they teach / examine*
- *Report of Quality Assurance Unit (QAU) on the progress of the transition and the degree of completion of the programme. In the case of UGP of a former Technological Educational Institution (TEI), the report must include a specific reference to how the internship was implemented*

Study Programme Compliance

The Department has prepared an analytical report to support the transition period from the 4-year UGP to the 5-year program. The period during which the Department continues to support the old UGP, the methods by which this is done, the transition process for students who wish to enrol on the new UGP, and the estimated time when students are expected to graduate are clearly defined in the report. The mandatory internship of the old UGP is adequately supported by the Department.

Regarding the students of the old UGP, who wish to graduate with the title of Environmental Engineer, the Department has drawn up a clear procedure concerning the obligations that the students need to complete in order to join the new UGP, the correspondence of courses between the old and new curricula, as well as any additional courses and any other obligations that they need to fulfil. Overall, the Department has taken adequate care to ensure a smooth transition period.

Panel Judgement

Principle 12: Monitoring the transition from previous undergraduate study programmes to the new ones	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

There are no specific recommendations.

PART C: CONCLUSIONS

I. Features of Good Practice

- All the members of staff are dedicated to the mission of the Department and the success of the new UGP.
- The laboratory infrastructure and equipment are in good condition, relatively new and well-maintained, and are exceeding expectations.
- The Department has excellent relations with the local stakeholders.
- The Department has implemented compliant mechanisms for monitoring and ensuring the high quality of the new UGP.
- A clear set of regulations, processes and procedures is documented in the departmental documents.
- A healthy number of students from the old UGP have already taken advantage of the opportunity to upgrade their degrees by enrolling on the new UGP.
- The staff of the Department has a healthy and productive relationship with the central university administration, despite being in a different city. There is also the sense of a collegial atmosphere within the Department.
- Good ATEI practices (such as a higher ratio of hands-on labs to theory) compared to long-established Mechanical Engineering departments have been sustained in the new UGP.
- Academic advisors are appointed for each first-year student.

II. Areas of Weakness

- The student-to-teaching staff ratio is very high.
- The teaching load is high.
- A low-level entry-student body.
- Some aspects of the current curriculum are still based on the ATEI Mechanical Engineering programme.
- Participation of students in feedback surveys is low.
- The number of laboratory support staff is small.
- Gender equality: no female faculty are employed in the Department.

III. Recommendations for Follow-up Actions

- The full website in English should be accessible as soon as possible.
- The legacy website should be deactivated as soon as possible because it causes confusion and may mislead interested audiences.

- The Department should request that the link to its website is activated on IHU's website.
- Establish an external advisory board with industry and community partners.
- There is a need for a longer period than the usual 2 months for an industrial internship.
- To be considered as a Mechanical Engineer School, an industrial management sector should be established.
- The new appointments should be oriented towards creating critical mass in control, industrial management and solid-computational mechanics, currently missing.
- Promote outreach activities to enable and facilitate societal impacts, for example, visiting schools in the region and professional societies and associations to promote awareness of the current societal issues and Science, Technology, Engineering, and Mathematics (STEM) related opportunities.
- Introduce further chances for soft-skills development. Embed such soft-skills development activities into the courses' intended learning outcomes, ensuring that these are balanced across the courses.
- Increase the number of hands-on practical exercises offered to the students, taking advantage of the available laboratory equipment and assets.
- Establish (probably at the university level) a support unit for training and upskilling academics' teaching skills.
- Establish a formal student progress monitoring process.
- Encourage students to take advantage of the ERASMUS mobility programme.
- Further engage with local industry to offer students practical training opportunities.
- Introduce a series of seminars to be delivered by external lecturers/industry representatives on the profession of Mechanical Engineering and the latest developments.
- Consider ways of increasing the update of student feedback surveys.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 2, 3, 4, 5, 7, 10, 11, and 12.**

The Principles where substantial compliance has been achieved are: **6 and 8.**

The Principles where partial compliance has been achieved are: **9.**

The Principles where failure of compliance was identified are: **None.**

Overall Judgement	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

1. **Prof. Konstantinos Kontis**,
University of Glasgow, Glasgow, UK (**Chair**)
2. **Prof. Konstantinos Salonitis**
Cranfield University, Cranfield, UK
3. **Prof. Michael Kokkolaras**
McGill University, Montreal, Canada
4. **Mr. Panagiotis Kiskiras**
Mechanical Engineer, Member of the Technical Chamber of Greece, Athens, Greece
5. **Mr. Efthymios Kechagias**
Student, Department of Mechanical Engineering, University of West Macedonia,
Kozani, Greece