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# Accreditation Report
# for the New Undergraduate Study Programme in operation (Integrated Master) of:

## Information and Electronic Engineering

**Institution: International Hellenic University**
**Date: July 9, 2024**

Με τη συγχρηματοδότηση της Ευρωπαϊκής Ένωσης
ΕΣΠΑ 2021-2027
Πρόγραμμα
Ανθρώπινο Δυναμικό και Κοινωνική Συνοχή
enqa.

Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation (Integrated Master) of **Information and Electronic 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 (Integrated Master) of **Information and Electronic 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. Sotiris Skevoulis (Chair)**
   Pace University

2. **Prof. Costas Iliopoulos (*)**
   King's College

3. **Prof. Marios Mavronicolas**
   University of Cyprus

4. **Mr. Panagiotis Kiskiras**
   Technical Chamber of Greece

5. **Mr. Vangelis Ananiadis**
   University of Thessaly

*(*) In memoriam Prof. Costas Iliopoulos who passed away during this accreditation visit.*

## II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) was formed in late June 2024 and received the accreditation support material concerning the Information and Electronic Engineering Undergraduate Programme on Tuesday June 18th and the online visit to the Programme began on the following Tuesday, June 25th. As a result, there was plenty of time to look into the support material before the beginning of the visit.

The quality of the support material was excellent. All documents (i.e. Student Guide, the Accreditation Proposal or the Course Descriptions, etc.) were very well crafted and designed. During the visit, all the participants involved (MODIP, Teaching and Administrative staff, students and social partners) were very prompt to provide us with all the information asked for. All the meetings were conducted online utilizing zoom from June 25th to June 26th in a very friendly and cooperative spirit. The meetings during the visit were scheduled as follows:

The EEAP members had a first meeting to get to know each other and distribute the work just before the meeting with the University officials. At the welcome meeting, the EEAP met with the Vice Rector Vice-Rector/President of MODIP & the Head of the Department. The following day EEAP met with the MODIP, Steering Committees/ OMEA members to discuss the compliance of the Programme to the Quality Standards for Accreditation. After the end of this meeting, the EEAP members met in a separate zoom meeting to discuss and reflect on their first impressions and prepare for the next day.

The following day, June 26th, at 4:00pm the Panel started a sequence of online meetings that lasted until 20:15. The teleconferences started with the teaching staff members of the Programme, followed by students, graduates, and administrative/teaching staff members, ended with employers/social partners. After the conclusion of the meetings the EEAP had a separate meeting to discuss the findings and provide a brief report to the Vice-Rector, the Department Head and the MODIP/OMEA members.

The last meeting of the day EEAP had its last follow-up conference with the OMEA and MODIP representatives during which additional comments and clarifications were brought up. The EEAP gave a short preliminary verbal report about their impressions and findings of the virtual visit. The Panel wishes to offer heartfelt thanks to the International Hellenic University for arranging and hosting these meetings and for the exceptional spirit of openness and collaboration with which it responded to the queries of the Panel over the course of the two days of the virtual visit.

## III. New Undergraduate Study Programme in operation Profile

The Department of Information and Electronic Engineering of the International Hellenic University is located in the suburban municipality of Sindos (15 km west of the city of Thessaloniki). The department was established in 2019 and covers the scientific fields of Information & Electronic Engineering.

It offers an Integrated Master's degree after five years of studies (10 academic semesters). At the postgraduate level, the Department offers programs leading to a Ph.D. degree with approximately 40 Ph.D. candidates and 2 PhD graduates. The Department claims the equivalence of its Integrated Master to a master's degree. The Committee considers this claim to be justified by the number of ECTS hours, which is comparable to other major engineering schools in Europe, depth of the education offered, curriculum structure, teaching methodology, academic staff qualifications and infrastructure facilities including laboratory, computer, teaching and library facilities. The programme has been design based on the principle of HAHE, ACM and IEEE Computer Society.

The program consists of 300 ECTS and spans into 10 semesters (five years) of studies. Graduates acquire knowledge and skills in Informatics and Electronic Engineering. The department operates three scientific laboratories: Information Management and Software Engineering Laboratory (IMSELab), the Intelligent Systems and Internet Applications Laboratory (ISLab) and Advanced Electronic Systems Laboratory (AESLab) all established in 2018. As part of their studies students must complete a thesis for 30 ECTS.

The department has 25 faculty members, 6 laboratory instruction staff (EDIP), 2 special technical laboratory staff (ETEP), 3 administrative personnel, and 8 temporary employees. There are approximately 1000 undergraduate students, 50 Masters students and 40 PhD candidates. The 5-year budget of the department is approximately 3,500,000 €.

Overall, the Panel was impressed by the level of competence of students and faculty, the facilities, and, especially, their high "esprit-de corps" despite the difficult socio-economic constraints. The internal accreditation report was prepared by the Department's internal evaluation unit OMEA and was available to the Committee prior to its visit. The Committee feels that the report provided a truthful assessment and covered in sufficient detail the 12 principles outlined in the Mapping Grid as provided by the HAHE.

# 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 place 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**

## I. Findings

The Department aligns with and supports modern, rapidly evolving trends in the broad fields of Information Technology and Electronic Engineering. This field integrates knowledge and skills from both disciplines, encompassing electrical and electronic circuits, embedded systems, algorithmic data processing, machine learning, artificial intelligence, automatic and intelligent control, and the creation, transmission, management, and security of information.

The Department places particular emphasis on the integration of these two areas. It focuses on the design, development, utilization, management, standardization, quality testing, and evaluation of electronic computing systems and services. Additionally, it promotes new technologies such as IoT, AI, tactile internet, big data, smart grids, robotics, autonomous vehicles, next-generation communications, software-defined networks, mobile and cloud computing, and biomedical technologies.

The PPS focus is on IoT, data science, and AI. Presence of similar programs internationally at institutions such as Imperial College, University of Surrey, University of Bristol, and University of Glasgow. The program is meticulously designed to fully cover the cognitive areas of Information Technology and the specialized field of Electronic Engineering (TEE). The department maintains a close relationship with local businesses and organizations in Thessaloniki, fostering practical collaborations and opportunities for students.

A SWOT Analysis showed that the program benefits from a pool of talented faculty and staff, equipped with the necessary expertise and experience to deliver high-quality education and research. There is a well-developed logistical infrastructure supporting the program, including state-of-the-art laboratories, research facilities, and advanced technological tools. The program has established strong connections with the local community and the broader region, fostering partnerships with local businesses, industries, and institutions. These ties enhance opportunities for collaborative projects, internships, and job placements for students, ensuring that their education is both relevant and practical.

A SWOT analysis also shows that the program currently faces challenges in establishing a strong academic coherence. This may be due to diverse course offerings, varying academic standards, or the integration of multiple disciplines that have yet to fully harmonize. The program inherits a technological history that may include outdated practices, technologies, and methodologies. This past can create hurdles in modernizing the curriculum and aligning it with contemporary standards. Furthermore, historically, the program's research output has been less competitive compared to established university departments. This may be reflected in fewer publications, lower citation rates, or less impactful research projects. Additionally, The admissions process admits students from varied educational backgrounds, such as GEL (General Lyceum) 2nd/4th field and EPAL (Vocational Lyceum). This diversity can lead to inhomogeneous student cohorts with different levels of preparedness and varying skill sets.

Finally, the physical location of the program is somewhat removed from the city centre, which may pose accessibility challenges for students and staff.

The program falls within the international UNESCO Scientific Fields (ISCED 2013): Information and Communication Technologies (0611. Computer use – 0612. Database and network design and administration – 0613. Software and applications development and analysis – 0619. Information and Communication) as well as Engineering, Manufacturing and Construction (071. Engineering and engineering trades – 0713. Electricity and energy – 0714. Electronics and automation).

The departmental teaching staff consist of 16 Professors, 2 Associate Professors, 7 Assistant Professors and 7 EDIP members. The department is located into 2 buildings and its teaching facilities include 2 Amphitheatres. 9 teaching rooms, 20 laboratories as well as various special purpose rooms.

The structure of the programme is as follows; Typical duration: 5 years, Number of courses, 45, Bachelor's thesis and ECTS credits: 300. The course types are: Mandatory: 32 Choice: 13 and Thesis (required). There are two specializations: Electronic and Embedded Systems (ILES) and special purpose rooms Programming, Data and Artificial Intelligence (PDTN).

Postgraduate studies and research offering of the department has as follows:

Master's degree programs

- Intelligent Internet Technologies (2013)
- Applied Electronic Systems (2017)
- Digital and Soft Skills in Education Sciences (2020)
- New technologies, innovation and teaching in the educational sciences (2024); Interdepartmental with the Department of Early Childhood Education and Care

Doctoral study program

- PhD candidates: 40
- Doctoral degrees awarded: 2

Research (university) laboratories

- Information Management and Software Engineering – https://imselab.iee.ihu.gr
- Intelligent Systems and Internet Applications – https://islab.iee.ihu.gr
- Advanced Electronic Systems – https://aeslab.iee.ihu.gr/

## II. Analysis

The Department is launching a new five-year undergraduate programme, designed from the ground up to meet contemporary societal and market needs. This approach ensures that the curriculum and program structure are fully aligned with current trends and demands in the job market, preparing students for the challenges of the modern workplace.

The program inherits a technological history that may include outdated practices, technologies, and methodologies. This past can create hurdles in modernizing the curriculum and aligning it with contemporary standards.

The teaching staff and learning facilities are adequate for the programme. Historically, the program's research output has been less competitive compared to established university departments. This may be reflected in fewer publications, lower citation rates, or less impactful research projects.

There is an ongoing concern regarding the formal recognition and establishment of professional rights for graduates, ensuring they are fully equipped and acknowledged in their respective fields.

The distance from the city centre can affect student life, commuting times, and the ease with which students can engage with city-based resources, internships, and extracurricular activities.

## III. Conclusion

The programme is substantially compliant with Principle 1. Some issues need to be addressed outlined in the recommendations.

**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 | |
| Substantially compliant | **X** |
| 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 | |
| Substantially compliant | **X** |
| 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 | |
| Substantially compliant | **X** |
| Partially compliant | |
| Non-compliant | |
| **g. Postgraduate studies** | |
| Fully compliant | |
| Substantially compliant | **X** |
| Partially compliant | |
| Non-compliant | |

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

**Panel Recommendations**

- Developing efficient transportation links and fostering a vibrant campus environment can help mitigate these issues.
- Efforts need to be directed towards enhancing research quality, securing more funding, and fostering innovative projects to elevate the program's research profile.
- Addressing the admission diversities, through tailored support programs and bridging courses is essential to ensure all students can succeed.

## 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

#### I. Findings

The Quality Assurance Policy of both IHU and the Department of Information and Electronic Engineering were found in place. They are found to satisfy their expectations at a satisfactory level.

### II. Analysis

No further analysis is in order, except to remind that all documents of importance comparable to that of the Quality Assurance Policy are supposed to be available in English, much more since IHU is international by definition.

### III. Conclusions

No documentable weaknesses have been found.

**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**

None.

## 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**

## I. Findings

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 Electronic 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.

## II. Analysis

There is sufficient evidence that all the elements of the UGP follow the European and National Qualifications Framework for Higher Education.

This UGP has been designed based on internationally established standards, processes and best practices from international Universities. It follows the current developments in the scientific and related research fields. Further documentation available was the study guides and course outlines for the entire UGP, the CVs of the teaching staff, as well as internal evaluation reports of the new study programme.

Moreover, students can acquire international experience through Erasmus+ mobility, and some students have profited from such actions. This experience has also allowed these students to know different study environments in their field of study and critically compare the quality of the educational and academic services offered to them in both places (local and foreign).

## III. Conclusions

The EEAP finds that the Institution is fully/substantially compliant with the requirements of Principle 3.

**Panel Judgement**

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

| **The External Evaluation & Accreditation Panel agrees that this Programme leads to a Level 7 Qualification according to the National & European Qualifications Network (Integrated Master)** | **YES** | **NO*** |
|---|---|---|
| | **X** | |

**Panel Recommendations**

3.1. It is highly recommended that the programme follows the international best practices in Master level higher education in IEE/IHU to broaden its academic offer with state-of-the-art specialised practical courses, update its infrastructure for laboratories and offer different elective itineraries for its students.

3.2. It is recommended to establish an External Advisory Board (EAB) comprising representatives from different stakeholders, with the primary goal of offering valuable advice on teaching, research, and other significant undertakings and advocating for and promoting the School externally. The EAB should convene at least once a year. During the review process, the panel consulted with several enthusiastic stakeholders about this suggestion.

3.3. The external practical training (internships) is of shorter duration than before (3 months instead of 6) and, importantly, is not mandatory, which limits its impact. The EEAP highly recommends that the programme explores novel approaches to increase the impact and added value of such internships, which both students and employers highly value.

## 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

#### I. Findings

The Department, along with the individual Professors, has made significant efforts to support Students. Enthusiastic Students have much to gain from the Professors' expertise, the Department's industry connections, and Student-organised teams. A Student-centred environment is encouraged, though there are still areas for improvement. The curriculum does not fully accommodate new coming Students, creating conflict in the Students' first years.

#### II. Analysis

The annual evaluation questionnaires, completed by a substantial number of students (exceeding 400 annually), are valuable in comprehending the department's strengths in fostering a student-centred environment and have contributed to the panel's accreditation process. A system for Student complaints is also in place. Anonymity is respected in both processes.

Learning and Teaching is provided in a satisfactory manner; Professors are invested in providing engaging lectures, relevant material for their courses and support regarding Student problems. Several courses, especially in the Electronics and Embedded Systems Group (ELES), include lab work, displaying the Departments commitment to technical skill development. Several programs, with the most prominent being an Academic Advisor program (Σύμβουλος Καθηγητής) and a Peer-Mentoring program (Πρόγραμμα ΟΜΠΡΕΛΑ) are in place to uphold academic advancement. Student-organised teams, such as the IEEE Student Branch, offer valuable opportunities and experiences.

The Department has been tasked by the Ministry of Education with accommodating students from both economic and science backgrounds. To achieve this highly challenging goal, the Department has assigned Rank A' Professors (Καθηγητές Α' Βαθμίδας) to provide the First-Year courses. However, the material set for most courses of the First Year Curriculum is perplexingly diverse, especially considering the strict balance this Department must achieve to support students from different Academic backgrounds. For instance, Electronic Physics, a first-semester course, covers an array of topics, including electromagnetism, light reflection and refraction, quantum theory, and nuclear energy, as noted on the Department's website. The Panel holds the opinion that the First-Year curriculum of the New Study Programme should be reformed to reduce the volume of material and ensure that each course focuses more intensively on essential topics.

All courses have a predefined grading system, easily accessible through the Department's website. During the Panel's review, it became apparent that the grading process heavily relies on the final exam. This could be the case due to the high number of students to Professors ratio, especially in the early semesters. Automated grading platforms could be used. In the following years, where more PhD Students are expected, grading should be evenly distributed among the semester, decompressing the exam period for Students and Professors alike. In the intervening time, lab exercises can serve as an effective means to assess progress throughout the semester, particularly given the department's substantial array of labs.

## III. Conclusions

While there is room for improvement regarding the Syllabus, the Department has made important steps in the development of a student-centred environment. The Panel believes it is crucial to maintain this approach, especially following the recent degree equivalency with that of a Greek Polytechnic Institution (Πολυτεχνικής Σχολής). Finally, the admission of Students with a background in Economics into the Department presents a significant challenge that lies beyond the Department's control. Efforts should continue to establish an agreement with the Ministry of Education to address this issue.

**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**

4.1. A reformation of the First-Year Syllabus is imperative to balance the distinct Student backgrounds. Establishing a robust foundation in essential knowledge can significantly aid Students' progress in subsequent years.

4.2. Grading should be less dependent on the Final Exams. Instead, homework, projects and lab exercises should bear greater weight in determining Student's final grade. In cases where manual grading by professors is impractical due to time constraints, automated grading services should be considered.

## 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

#### I. Findings

The Panel has determined that the Department is up to standard regarding student regulations and their accessibility, from the first year through to the completion of their studies. Both Mobility and Practical Training programs have been a point of success for the Department in the past years.

## II. Analysis

The Department's comprehensive website provides Students with easy access to rules, regulations and documents. Prior to their first day as University Students, they are contacted with relevant information. On their first day, they are introduced to the department through a welcoming ceremony, during which the variety of services offered to them is presented. The two primary services utilised by Students are Moodle, a learning content platform where professors upload course-related material and announcements, and Unitron, a platform for task automation, such as supplying documents, reviewing progress, among others. Finally, upon graduation, all students receive their Diploma Supplement, including information on ECTS credits and relevant information.

ECTS credits are currently distributed equally among all courses. The Panel believes that implementing a weighted distribution of ECTS units, particularly in selective courses, can encourage students to enrol in more demanding courses that are more closely aligned with their Academic goals.

The Department has connections to over 50 Universities outside of Greece, while in the years 2019-2023 an estimated number of 100 students have participated in the Erasmus student exchange program. The department is clearly focused on enhancing its international presence and encouraging Student mobility.

The Department's connections to the industry, complete with an external-stakeholders advisory board, hold great value to Students with the aspiration to interconnect and develop their career. The department organises Career Days, providing students with opportunities to meet industry professionals and discuss the potential benefits of Practical Training during their undergraduate years, among other similar topics.

## III. Conclusions

The department meets European quality standards in administrative student-related matters and mobility and practical training opportunities.

**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**

5.1. The Department should consider assigning ECTS to each course relative to the course's importance. Factors to be considered when weighing the importance of a course are course objectives and learning outcomes, sequential importance to other courses, overall contribution to program goals, among others.

## 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

#### I. Findings

The new undergraduate program, "Computer, Informatics and Telecommunications Engineering," is offered by the Department of Information and Electronic Engineering. This program is primarily taught by the faculty members of the Department. The recruitment and promotion of faculty members in Greek universities are regulated by national laws, ensuring a standardized and transparent process. The Departments successfully attracts candidates for any available faculty vacancies, maintaining a good standard of teaching and research.

The panel learned that approximately 1-2 faculty members utilize sabbatical leaves. Faculty members also take advantage of Erasmus+ mobility programs, enhancing their academic and professional experiences through international collaboration.

The faculty's workload is approximately 8-9 hours per week. This workload is deemed appropriate and in line with international best practices, allowing sufficient time for faculty

members to engage in research activities. However, the submitted documentation does not clearly illustrate how the offered program is integrated with the faculty's research activities.

There is a well-established procedure for collecting student feedback through appropriately designed questionnaires. The panel was informed that the participation rate for these feedback exercises is quite high, exceeding 50% among the students.

The faculty's specializations and research interests are well-aligned with the theme, scope, and courses offered in the program. This alignment ensures that students receive a comprehensive and relevant education that is closely connected to current research and industry trends.

Historically, however, the program's research output has been less competitive compared to more established university departments. This is evident in several key metrics. The program has produced fewer publications in peer-reviewed journals, which can be an indicator of the volume and frequency of research activity. Additionally, the citation rates for these publications tend to be lower, suggesting that the research may not be as widely recognized or utilized by the broader academic community. Furthermore, the research projects undertaken within the program have generally been less impactful, potentially due to limited resources, smaller research teams, or narrower research scopes.

## II. Analysis

The instructors within the program possess the necessary qualifications, bringing a wealth of knowledge, expertise, and experience to their teaching roles. This ensures that students are guided and mentored by capable educators who are well-versed in their respective fields. The offered program is designed to align closely with the interests and specializations of the department, creating a cohesive and focused academic environment. This alignment helps ensure that the curriculum is relevant, up-to-date, and reflective of the latest developments and trends in the field of Computer, Informatics, and Telecommunications Engineering.

There is financial support available for faculty members, which plays a crucial role in fostering their professional development and enhancing their academic contributions. One key source of this support is the Erasmus+ program, which provides opportunities for mobility. Through Erasmus+, faculty members can engage in international exchanges, collaborate with peers at other institutions, and gain new perspectives and insights that can enrich their teaching and research.

Additionally, financial support is provided for faculty members to participate in conferences and research meetings. This enables them to stay abreast of the latest research findings, network with other professionals, and present their own work to the wider academic community. Such participation not only enhances the faculty's professional development but also raises the profile of the department and the program on an international stage.

Overall, the combination of highly qualified instructors and robust financial support mechanisms ensures that the faculty can continue to develop professionally, contribute to the advancement of their field, and deliver a high-quality educational experience to their students.

After the transformation from TEI to University, efforts are being made to enhance the research capabilities of the program. Improving the quantity and quality of research output can lead to greater recognition, higher citation rates, and more significant contributions to the field. This, in turn, can attract more funding, partnerships, and better-calibre faculty and students, creating a virtuous cycle of improvement and competitiveness in research.

### III. Conclusion

Overall, the department has a well-established and transparent procedure for the recruitment of teaching staff, ensuring that qualified and suitable candidates are selected. This recruitment process is designed to be rigorous and comprehensive, involving multiple stages of evaluation and assessment to guarantee that new hires meet the high standards expected by the department and the university as a whole. Efforts need to be directed towards enhancing research quality, securing more funding, and fostering innovative projects to elevate the program's research profile.

**Panel Judgement**

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

**Panel Recommendations**

Efforts need to be directed towards enhancing research quality, securing more funding, and fostering innovative projects to elevate the program's research profile.

## 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

#### I. Findings

The Department provides a wide range of applications for use by Students and Professors complete with detailed instructions and descriptions. Although the Department's website contains information on available infrastructural services, some sections are incomplete. The Department offers an array of mostly equipped infrastructure that undergoes intensive daily usage and, through effective organisation, manages to operate smoothly. Still, there is very limited infrastructure for students to spend their free time or time between classes, which poses a significant issue.

## II. Analysis

A wide range of applications created by Students and overseen by Professors provide support and information for various Academic needs. This is a testament to the Department's commitment to a modern and international character. These services also contain detailed usage instructions. Some notable mentions are the Dashboard which redirects to all the other applications, a platform for thesis management and approval, and a database with a list of publications made by members of the Department.

The Administrative Office is available to Students from 12:00 to 14:00 daily. While these hours may be sufficient for most, some Students may be unable to visit the Department during this timeframe. The Department should consider extending these hours. Additionally, Students should have the option to contact Administrative Staff through online meetings.

Information about the infrastructure is available on the Department's website. However, it lacks details regarding infrastructure specifically provided for Students with disabilities (ΦμεΑ), even though such facilities do exist. This gap in information needs to be addressed.

The Department offers modern infrastructure that accelerates and aids learning and teaching. Despite these advancements, Building P (Κτίριο Π) faces issues regarding limited Staff space, lecture space and outdated computers in the Labs. Furthermore, there is almost no infrastructure for Students to spend their free time or time between classes. This is a significant issue that the Department must strive to correct. The Panel acknowledges the administrative and practical challenges that may arise. Nonetheless, considering the lengthy commute required for most Students to reach the campus and the limited space available in the campus library, it is imperative that the Department prioritises addressing these issues to ensure a smooth Learning experience for Students.

## III. Conclusions

The Department has demonstrated high standards in providing a seamless learning and teaching experience and should strive to uphold these standards, by addressing the aforementioned issues.

**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**

7.1. The Department should consider extending the hours that the Administrative Office is open for Students. If this is not feasible, online meeting hours could be offered as an alternative.

7.2. The Department should update its website to detail the infrastructure and services available to Students with Disabilities (ΦμεΑ).

7.3. The Department should prioritise upgrading its infrastructure. While university administrative issues may arise, it is imperative for the Department to modernise part of its equipment and provide Students with study rooms.

## 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

#### I. Findings

The management of information within the department has been thoroughly developed and is efficiently organized. This comprehensive information management system covers a wide array of functions critical to the department's operations. It includes robust mechanisms for data collection, storage, and retrieval, facilitating seamless access to essential information for both administrative staff and faculty. Key components of this system include:

- Student Information Systems: These systems manage student data, including enrolment records, academic performance, attendance, and progression tracking. They enable faculty and administrative staff to monitor student progress and identify areas where additional support may be needed.
- Course Management Systems: These systems streamline course scheduling, registration, and resource allocation. They ensure that courses are properly staffed, classrooms are adequately equipped, and students can easily register for the classes they need.
- Research and Publication Tracking: The department's information system also includes features for tracking faculty research outputs and publications. This helps in maintaining an up-to-date record of the department's academic contributions and facilitates the evaluation of research impact.

- Financial and Budget Management: Efficient management of financial data is crucial for the department's operations. The system includes tools for budgeting, expenditure tracking, and financial reporting, ensuring that resources are used effectively and transparently.
- Feedback and Evaluation Systems: These systems collect and analyse feedback from students, faculty, and other stakeholders. Regular evaluations help in identifying strengths and areas for improvement, ensuring that the department continually enhances its services and academic offerings.

## II. Analysis

The department boasts a robust and efficiently structured information management system that is currently in operation. This system is designed to streamline various administrative and academic processes, ensuring that information is accurately recorded, easily accessible, and effectively utilized. The system supports a range of functions, including student enrolment, course registration, grading, and academic advising, thereby enhancing the overall efficiency and effectiveness of the department's operations.

Although the department is in the final phases of its transition and is still in the early stages of its development, it is making significant strides towards full operational maturity. This transitional phase involves implementing new systems, procedures, and structures that will support the department's long-term goals and objectives. As part of this ongoing development, the department is focused on establishing a solid foundation that will facilitate future growth and success.

However, some critical performance indicators, such as career paths and completion rates, will only become available in the coming years as more data is gathered and analysed. Career paths will provide insights into the professional trajectories of graduates, helping to assess the effectiveness of the program in preparing students for the job market and their subsequent careers. Similarly, completion rates will offer important information on student retention and success, highlighting areas where the program excels and identifying opportunities for improvement.

As the department continues to develop and accumulate more data, these performance indicators will become essential tools for continuous improvement. They will enable the department to make data-driven decisions, refine its curriculum, enhance student support services, and ultimately ensure that the program meets the highest standards of academic excellence. The commitment to ongoing assessment and improvement reflects the department's dedication to providing a high-quality educational experience and achieving long-term success.

### III. Conclusions

By achieving compliance with Principle 8, the department has demonstrated its ability to implement and maintain an information management system that supports its strategic objectives and operational needs. This organized approach to managing information not only enhances administrative efficiency but also supports the department's academic mission by providing reliable data for decision-making and continuous improvement.

**Panel Judgement**

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

**Panel Recommendations**

None.

## 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

#### I. Findings

Almost all relevant information has been found to be in place and relatively satisfactory.

#### II. Analysis

The quality of the "Announcement Board" implemented by the Department is applaudable. Nevertheless, it could be made more attractive by including some more details (if and when available) about the prospective employment of the graduates and about specific graduate programs suitable for following postgraduate studies. We envision, as a first step, the design of a web site with links to such relevant postgraduate programs in Greece, possibly accompanied with evidence about graduates of the program that followed the postgraduate programs.

Furthermore, the absence of publication of the questionnaire results (at least, their numeric summaries) is another weakness, which, however, could be easily rectified.

#### III. Conclusions

It should be better realised that improving the announcement and publicity mechanisms will, in the long run, help to improve the internationalisation of the program, the department and

the institution. Without a fluent mechanism for the dissemination of information beyond the national limit, fame spreading will have to fail.

**Panel Judgement**

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

**Panel Recommendations**

None.

## 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

#### I. Findings

The clearly articulated quality policy of the Department, in conjunction with the quality assurance regulations and the implemented system, ensures internal reviews of study programmes. This is achieved by clear description of the relevant procedures for continuous evaluation and revision of the undergraduate curriculum as well as for identifying threats and weaknesses and developing associated mitigation action plans.

Changes to courses and the programmes are proposed and evaluated through a formal process and is approved through the Committee for Undergraduate Studies. Faculty can propose new courses and curricular changes and eliminate or combine courses through this mechanism. Student workload is monitored primarily through course surveys. Student assessment in courses is well structured.

## II. Analysis

Logged student responses to course surveys stand to be improved; this is a challenge for evaluating faculty and providing feedback on courses. Formal surveys are offered only at the end of the course, which is too late to improve a course.

It is recommended 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.

Student expectations, needs, and workload are collected through surveys for each course. One fact is the high response rate for course surveys. Students are aware of these end-of-course surveys and fill them out towards the end of the semester.

## III. Conclusion

Based on the above, the EEAP finds that the UGP is fully compliant for Principle 10.

**Panel Judgement**

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

**Panel Recommendations**

10.1. The EEAP recommends that the reports of the annual internal evaluations are publicly available on the Departmental websites to promote transparency and reflect the Department's commitment to continuous improvement.

10.2. The EEAP recommends focusing on the development of some soft skills for the students throughout the courses, as it is a disadvantage observed by the industrial partners.

## 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

#### I. Findings

Last time that the previous TEI departments went through external evaluation was in 2012. The findings of the evaluation committee at that time led to the programme restructure of the previous TEI departments and then in the newly established IEE/IHU which took place the academic year 2019/2020.

#### II. Analysis

Faculty, support staff and administrative personnel are aware of the importance of the external evaluation and have done their best to comply with the whole process. All involved parties seemed willing to contribute to the evaluation.

There is some evidence that there is a newly established advisory board but there is no formal interaction to make this correspondence more efficient.

#### III. Conclusions

The EEAP concludes that the UGP is substantially compliant for Principle 11.

**Panel Judgement**

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

**Panel Recommendations**

The EEAP recommends that the external evaluation process must be a regularly recurring event with a strict requirement to address and start implementing recommendations within one year.

## 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

#### I. Findings

We found that IHU has a good implementation plan for the appropriate transition procedures at a quite satisfactory level and that both IHU and the department are well-equipped to support the transition.

The department's plan to adjust with the QAU report remains a bit vague.

#### II. Analysis

There are no points to analyse further.

### III. Conclusions

No documentable weakness has been identified.

**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**

The Panel recommends that the department makes a timely and detailed plan for internally assessing and monitoring the degree of their abiding by the QAU report.

# PART C: CONCLUSIONS

## I. Features of Good Practice

- The teaching staff and learning facilities are adequate for the programme.
- IHU has a good implementation plan for the appropriate transition procedures at a quite satisfactory level and that both IHU and the department are well-equipped to support the transition.
- The department is focused on enhancing its international presence, by encouraging student and member mobility, and by generally upholding modern European quality standards.
- A student-centred approach is implemented in Learning and Teaching.

## II. Areas of Weakness

- Part of the infrastructure requires upgrading.
- The First-Year syllabus is not welcoming to new coming students.
- Not all documents of importance are available in English, as it should be expected for an international university.
- Poor transparency regarding making questionnaire results publicly available.
- Insufficient dissemination of information which senior year undergraduates and graduates would need to know (e.g., information about relevant postgraduate programs or employment prospects).
- Sub-standard quality of announcement tools and procedures

## III. Recommendations for Follow-up Actions

- Developing efficient transportation links and fostering a vibrant campus environment can help mitigate these issues.
- Efforts need to be directed towards enhancing research quality, securing more funding, and fostering innovative projects to elevate the program's research profile.
- Addressing the admission diversities, through tailored support programs and bridging courses is essential to ensure all students can succeed.
- A reformation of the First-Year Syllabus is imperative to balance the distinct Student backgrounds. Establishing a robust foundation in essential knowledge can significantly aid Students' progress in subsequent years.
- Grading should be less dependent on the Final Exams. Instead, homework, projects and lab exercises should bear greater weight in determining Student's final grade. In cases

where manual grading by professors is impractical due to time constraints, automated grading services should be considered.

- The Department should consider assigning ECTS to each course relative to the course's importance. Factors to be considered when weighing the importance of a course are course objectives and learning outcomes, sequential importance to other courses, overall contribution to program goals, among others.
- Efforts need to be directed towards enhancing research quality, securing more funding, and fostering innovative projects to elevate the program's research profile.
- The Department should consider extending the hours that the Administrative Office is open for Students. If this is not feasible, online meeting hours could be offered as an alternative.
- The Department should update its website to detail the infrastructure and services available to Students with Disabilities (ΦμεΑ).
- The Department should prioritise upgrading its infrastructure. While university administrative issues may arise, it is imperative for the Department to modernise part of its equipment and provide Students with study rooms.
- 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).
- The department makes a timely and detailed plan for internally assessing and monitoring the degree of their abiding by the QAU report.
- The EEAP recommends that the reports of the annual internal evaluations are publicly available on the Departmental websites to promote transparency and reflect the Department's commitment to continuous improvement.
- The EEAP recommends focusing on the development of some soft skills for the students throughout the courses, as it is a disadvantage observed by the industrial partners.

## IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 2, 4, 5, 6, 7, 8, 10, 12

The Principles where substantial compliance has been achieved are: 1, 3, 9, 11

The Principles where partial compliance has been achieved are: NONE

The Principles where failure of compliance was identified are: NONE

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

| **The External Evaluation & Accreditation Panel agrees that this Programme leads to a Level 7 Qualification according to the National & European Qualifications Network (Integrated Master)** | **YES**<br><br>**X** | **NO** |
|---|---|---|

## The members of the External Evaluation & Accreditation Panel

**Name and Surname** **Signature**

1. **Prof. Sotiris Skevoulis (Chair)**
   Pace University

2. **Prof. Costas Iliopoulos (*)**
   King's College

3. **Prof. Marios Mavronicolas**
   University of Cyprus

4. **Mr. Panagiotis Kiskiras**
   Technical Chamber of Greece

5. **Mr. Vangelis Ananiadis**
   University of Thessaly

*(*) In memoriam Prof. Costas Iliopoulos who passed away during this accreditation visit.*