



**ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ**  
HELLENIC REPUBLIC



**Εθνική Αρχή  
Ανώτατης Εκπαίδευσης**  
Hellenic Authority  
for Higher Education

Αριστείδου 1 & Ευριπίδου 2 • 10559 Αθήνα | 1 Aristidou str. & 2 Evripidou str. • 10559 Athens, Greece  
**T.** +30 210 9220 944 • **F.** +30 210 9220 143 • **E.** secretariat@ethaae.gr • [www.ethaae.gr](http://www.ethaae.gr)

**Accreditation Report**  
**for the New Undergraduate Study Programme in**  
**Operation (Integrated Master) of:**

**Department of Electrical and Computer Engineering**

**Institution: University of Peloponnese**

**Date: 26 June 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 (Integrated Master) of **Electrical and Computer Engineering** of the **University of Peloponnese** for the purposes of granting accreditation.

## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <b>Part A: Background and Context of the Review</b> .....  | <b>4</b>  |
| I. The External Evaluation & Accreditation Panel.....  | 4         |
| II. Review Procedure and Documentation .....   | 5         |
| III. New Undergraduate Study Programme in operation Profile.....   | 7         |
| <b>Part B: Compliance with the Principles</b> .....  | <b>8</b>  |
| Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit.....  | 8         |
| Principle 2: Quality Assurance Policy of the Institution and the Academic Unit.....  | 16        |
| Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes.....   | 20        |
| Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students.....  | 24        |
| Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes..... | 27        |
| Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes .....  | 30        |
| Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes...   | 33        |
| Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes .....  | 35        |
| Principle 9: Public Information Concerning the New Undergraduate Programmes .....  | 37        |
| Principle 10: Periodic Internal Review of the New Study Programmes.....  | 39        |
| Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes.....   | 42        |
| Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones.....  | 44        |
| <b>Part C: Conclusions</b> .....   | <b>47</b> |
| I. Features of Good Practice .....   | 47        |
| II. Areas of Weakness .....  | 47        |
| III. Recommendations for Follow-up Actions .....   | 48        |
| IV. Summary & Overall Assessment .....   | 52        |

## **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 **Electrical and Computer Engineering** of the **University of Peloponnese** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

**1. Assoc. Prof. Konstantinos Kopsidas (Chair)**

The University of Manchester, Manchester, United Kingdom

**2. Prof. Costas Iliopoulos**

King's College London (KCL), London, United Kingdom

**3. Mr. Sotirios Michalopoulos**

Member of the Technical Chamber of Greece, Greece

**4. Mr. Georgios Psaltakis**

Student, Department of Electrical and Computer Engineering, Hellenic Mediterranean University, Heraklion Crete, Greece

## II. Review Procedure and Documentation

The External Evaluation and Accreditation Panel (EEAP) attended a series of videoconference meetings (zoom) with the Department of Electrical and Computer Engineering (ECE) of the University of Peloponnese (UoPe), belongs to the School of Engineering based in Patra and was founded in May 2019. The External Evaluation & Accreditation Panel Review by Electronic Means was scheduled for two days of interviews on Monday the 12<sup>th</sup> and the 13<sup>th</sup> of June 2023, with the remaining week for drafting the Accreditation Report. The Head of the Department (HoD), Prof. Nikolaos Voros, introduced the Department of ECE through a presentation<sup>1</sup> of an overview of the Department and its Undergraduate (UG) Programme (integrated Master), some basic departmental key performance indicators (KPIs) of past four years, the summary of the SWOT<sup>2</sup> analysis and the synthesis of their staff. Following that introductory meeting, the Panel met with the Department's Internal Evaluation Group (IEG) and Quality Assurance Unit (QAU) of the UoPe representatives. This follow-up session was a set of presentations structured to capture all the principles of the accreditation procedure with a very summative and structured approach. This was indeed a very organised and valuable session. It started with Prof. Nikolaos Voros, Chair of the Department's IEG, delivered a presentation during the second session of the review process on June 12<sup>th</sup>, 2023, about the Department's strategy, feasibility and sustainability, programme of studies. Then followed by other members of the most recent IEG summarising the other (2-11) principles. The EEAP had a private session to provide a synopsis of the findings and exchange their initial opinions on several aspects that were identified during the first day of the Accreditation review process.

The second day (June 13<sup>th</sup>, 2023) of the Accreditation review started with discussion between EEAP and a few academics and technical staff members from the Department and met several students from 1<sup>st</sup> to 4<sup>th</sup> year of study. The discussion with the academics focused on assessing their opportunities for continuing professional development and progression and their involvement in quality assurance practices. The discussion with the students focused on their study experience, satisfaction with the Departments and Institution facilities provision, input in quality assurance and issues concerning welfare and campus experience, as well as their mobility opportunities (e.g., ERASMUS+, Industrial Placements etc.) and internationalisation (student engagement with international student groups – i.e., IEEE student chapters and other learning activities). The main focus of the EEAP was identifying the graduate student's integration into the industry and their opportunities for further studies and mobility options (i.e., International studentships and Job opportunities) and the processes they feed information from their personal experiences to the Department concerning their learning experience, UG Programme Study and courses that might need updating/reviewing.

---

<sup>1</sup> HoD Presentation, Document Name: “[HMMY] Παρουσίαση Προέδρου final” presentation title: “Εθνική Αρχή Ανώτατης Εκπαίδευσης Πιστοποίηση Τμήματος ΗΜΜΥ”

<sup>2</sup> SWOT: Strengths, Weakness, Opportunities, Threats

The review continued with a presentation summarising its facilities, infrastructure, and some spaces across the University (e.g., the Library, etc.) as well as a live video tour indicating the status of the labs at the time of the review.

The Accreditation review concluded with several industrial collaborators, including representatives from private and public companies. The EEAP had an opportunity to explore the mechanisms/procedures, in place, facilitating their interactions with the Department, their view regarding the UG Programme of Studies, the quality of the students concerning the new technological advancements they learn and the Programme of Studies specialisation streams and industrial practice the Department offers.

The final stage of the review was the EEAP chair to provide EEAP's draft list of findings and immediate feedback from summarising mainly, due to the time constraints, the aspects for improvement. The EEAP's view on this 15-minute session was to provide the Departments IEG with the areas that they should focus their discussions on their next internal evaluation group meeting.

The EEAP uses the remaining scheduled activities as an opportunity to collect additional evidence and clarifications on the Department's implementation of presented procedures (e.g., terms of reference and minutes of Working Groups like the IEG, any advisory boards, any specific actions allocated with timelines, etc.). Such evidence often indicates a well-established, well-documented, and systematic approach that allows the Department's continuous improvement and quality assurance in several aspects. For example, the effective implementation of a periodic UG Programme Study review, ensuring the inclusion of emerging topics and teaching material, the efficient use of facilities, and improving the processes that enable students' and industrial partners' feedback to the continuous review and development of the Department's activities.

The Department's preparation for the Accreditation Review (QAA) Process was very good and they provided the requested evidence promptly. It should be noted that the ECE Department's of UoPe set of presentations was nicely structured and helpful in capturing individual principles of the QAA Process. The presentations were compact with information and their allocated time was far too short to discuss most points. In the future, more (twice as much) time should be allocated for that programmed activity. Furthermore, to facilitate the QAA Review, the presentations should contain more evidence-based points. For example:

- Stating the actions/reasons/approaches for the student-centred curriculum is achieved and the evidence the decision-making took place (minutes and actions).
- Providing the procedure for which the Department's mission is formulated in the presentation and the future planning for review and updating.
- Providing minutes from past meetings of IEG with points of discussion, decision making and actions allocation with timelines, as well as their status (ongoing, completed).

The report hereafter presents the collective findings of the EEAP based on the two-day meetings, shared documentation provided by the Department, private discussions followed during the review with the different stakeholders, and email communication with the Department's staff.

### **III. New Undergraduate Study Programme in operation Profile**

The (UG) Programme offered by the ECE Department of the UoPe (Patra campus) is a five (5) year degree comprising ten (10) semesters that correspond to 300 ECTS (European Credit Transfer System) credits. The UG programme awards its graduates a Masters of Engineering (MEng) degree. The curriculum offers a basic education lasting six (6) academic semesters and four (4) Directions of Studies lasting four (4) academic semesters. The Directions of Studies are Informatics; Electronics, Computers and Systems; Energy Systems; and Signals, Telecommunications and Directions of Studies Networks. The programme offers 100 courses/modules, with the first six (6) semesters having 40 compulsory courses, followed by the three (3) semesters having 8 compulsory courses for each Selective Direction of Study the student undertakes, and 4 elective courses. There is a final semester in which the student undertakes their Final Year Individual Project Dissertation. The Department offers an optional internship (industrial placement), varying from two to six months and equated to 5 ECTS per month.

The UG programme Study was reviewed in 2019 when the Programme Study changed. As a result, students who registered and followed the old UG Programme Study must take an internship for six months. However, new students can only register for the new Programme Study.

## **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

### I. Findings

- a. The Department of ECE academic profile and mission are documented on the Home page of their website. It captures the internationally established scientific fields of Higher Education in Energy Systems<sup>3</sup>; Signals, Telecommunications and Networks; Electronics, Computers and Systems; and Informatics. There is an inconsistency within the website (and provided pdf documentation) of the ECE department between the English and Greek pages. The Department's mission statement is very brief and poorly structured. It captures only the impact on education but does not highlight the broader perspective of an Internationally visible institution, as it lacks to capture its impact, Research and Social Responsibility.
- b. The academic development strategy for the operation of the Department and SWOT analysis are presented during the review process and from what is provided on the "Quality Policy & Goals" webpage starting that it is discussed during their annual General Assembly Sessions and reported in the procedures by QAU as provided during the evaluation. The provided reports indicate a systematic approach that influences the Department's programme study, teaching activities and scientific research field. Furthermore, the reports capture parameters influencing departmental, economic, and social aspects.
- c. The feasibility of the Department's operation and documentation for the UGT programme study are also presented<sup>4</sup>, indicating a systematic approach for the Department's programme study transition in 2019. The IEG reports, present on the website<sup>5</sup>, effectively capture all the aspects of the feasibility of the Department's operations. From the discussions with students, graduates, and industrial partners during the evaluation<sup>6</sup> (on June 13<sup>th</sup>), it is understood that their contribution to UGT Programme Study Review process was mainly through the course questionnaires and academic decision-making during the Department's General Assembly. However, there was no evidence that industrial partners provided recommendations systematically and that General Assembly did not indicate any collective outputs/contribution (on this aspect). The industrial partners reviewed during the procedure indicated an ad-hoc way via email and/or personal discussions with academics collaborating on research projects and other teaching/training activities. None of the Industrial Experts Panel<sup>7</sup> members were present during the industrial and social partners review, who would have helped to discuss their views and their contribution (and the process) to the Department's national and international visibility.
- d. The sustainability of the Department's infrastructure, human resources, funding perspective, provided services, and all other available resources are presented (on June 13<sup>th</sup>). Mechanisms are in place to record and manage effectively the educational and research facilities (amphitheatres, lab equipment and other infrastructure), staff and services related to student support, and DASS (Disability Advisory and Support Service).

---

<sup>3</sup> International Standard Classification of Education, Fields of education and training 2013 (ISCED-F 2013) –Detailed field descriptions <https://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-fields-of-education-and-training-2013-detailed-field-descriptions-2015-en.pdf>

<sup>4</sup> Presentation: Στρατηγικός Προγραμματισμός, Σκοπιμότητα Και Βιωσιμότητα Της Ακαδημαϊκής Μονάδας

<sup>5</sup> Website information: <https://www.ece.uop.gr/politiki-poiotitas/>

<sup>6</sup> Final Timetable of the External Evaluation & Accreditation Panel Review by Electronic Means

<sup>7</sup> B26.6 Βιομηχανικό συμβουλευτικό συμβούλιο.pdf

- The latter was not provided on campus but only via online communication, although an academic advisor is allocated for every student.
- e. The Department's Programme Study is well structured and documented within the Study Guide<sup>8</sup>. It is easy to find it on dedicated web pages. ECE provides a comprehensive organisation of the UGP Study Guide (e.g., semesters, compulsory units and when the students can consider the industrial experience). However, the Programme Study does not provide the learning outcomes for every course but only the generic programme's. The structure of the studies captures learning methods mainly based on traditional lecturing and laboratory approaches. The Programme Study did not provide evidence of software tools/platforms (e.g., IPSA or Power World, CAD and PCB design tools) used in specific courses/modules and the lab/coursework activities of the courses did not specify the activity, report, and delivery of the activity with details (e.g., team working lab activity of "X" number of students with an individually submitted report etc.).
  - f. The Department registers approximately 220 new students in the ECE UGP every academic year. There are student transfers from/away UoPe, but the overall net move of the students is balanced. However, it can be seen that most (if not all) of the students are transfers between the three Universities with the lowest entry levels. The provided documentation shows approximately 850 UG students registered from 2019 to 2022 at the Department, indicating a healthy number of students for the Department's viability. In fact, ECE's plan/recommendation is to reduce the new registrations to 150 students.
  - g. The Department's research activity indicates scientific field priorities and interdisciplinary work is reported on the Department's web pages and a summary of the Department's research activities (presented on June 13<sup>th</sup>). ECE Department provides two Postgraduate Teaching (PGT) Programmes<sup>9</sup> and a healthy (70 students) number of Doctorate students (PhDs).

The University Strategic Development Plan<sup>10</sup> for 2022-2025 is provided with the Overview (Background, Vision, and Mission of the UoPe). However, it seems no documented procedure for delivering a long-term (4 Year) Departmental Strategic Development Plan indicates the revisions and how this is derived.

## II. Analysis

The meetings during the review process helped provide insightful information on the Quality Assurance procedures. Most of the documentation indicates the Department's Mission, Feasibility and Sustainability. The student numbers, programme study, the existing infrastructure and laboratory facilities and research capacity were found to be outstanding quality levels. This was the result of quality assurance practices.

However, it was found that QAU of the UoPe and the IEG of the Department seemed to not provide systematic documentation of the reviews. More specifically, although the Department's IEG annually reported the findings for (Quality Assurance and Accreditation), QAA practices the QAU<sup>11</sup> of the UoPe seemed to not fully appreciate their role in collating the IEG reports of the different departments and summarising good and poor practices (and

---

<sup>8</sup> ECE Curriculum for 2022-2023 Academic Year: [https://www.ece.uop.gr/wp-content/uploads/2023/04/HMMY-Οδηγός-Σπουδών-2022-2023-v1.2\\_EN.pdf](https://www.ece.uop.gr/wp-content/uploads/2023/04/HMMY-Οδηγός-Σπουδών-2022-2023-v1.2_EN.pdf)

<sup>9</sup> Modern Applications of Electric Power Systems Postgraduate Programme: <https://energy-app.ece.uop.gr/>

<sup>10</sup> Στρατηγικό Σχέδιο Τμήματος Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών, Document: B26.11 Στρατηγικό Σχέδιο THMMY.pdf B3 Στρατηγικό σχέδιο ΠΑΠΕΛ 2022-2025.pdf

<sup>11</sup> Εκθέσεις Εξωτερικής Αξιολόγησης: <https://modip.uop.gr/index.php/ektheseis/ektheseis-eksoterikis-aksiologisis>

comparing those with other departments), helping this way the continuing improvement of the Department. The UoPe central administration should be informed of the importance of providing annual feedback to IEG's Internal Evaluation Actions/Findings.

Any HE Department's mission should be greater than teaching. Reading the statement on the ECE Department's opening webpage shows that they lack vision in actively engaging with the local community and social activities, delivering industrial impact, supporting the local authorities to organise their activities etc. The EEAP saw evidence that the Department contributes to most of the aspects mentioned above the Department's mission needs to be restructured to reflect the Greek Higher Education Strategy<sup>12</sup>.

The Department's SWOT and Planning had no specific actions with deadlines or tasks/activities allocated to address some of them. Most importantly, there were no past actions, minutes, or recordings of their effectiveness. An example is the low ERASMUS+ student participation; the response EEAP received was "This is the effect of COVID". However, that was two years back and lectures and campuses in the EU have been open since September 2021. EEAP also observed low academic mobility. Although the SWOT analysis reports the risk of the pandemic (among others), no actions are reported on how to minimise / participate in activities remotely.

During the EEAP review with the industrial partners<sup>13</sup>, there seemed to be no formal procedure to communicate their inputs/insights to the Department systematically. The discussions with the twelve (12) industrial partners indicated an ad-hoc way via email and/or personal discussions with academics collaborating on research projects and other teaching/training activities. It should also be noted that during the Accreditation Review Process scheduled discussions with industrial and social partners, none of the Industrial Experts Panel<sup>14</sup> members was present (on June 13<sup>th</sup>).

The Department's website is well-structured and provides enough information to engage with the students, researcher and broader public about the programme studies, UGT and PGT programmes. However, there still are some inconsistencies between the English and Greek versions in critical parts (e.g., Quality Policy & Goals).

The Programme Study Guide of the Department is in a good state and includes the majority of information required. However, it would have been nice to include more details of the courses. For example, the Intended Learning Outcomes (ILOs), the specialised software or facilities used, basic relevant literature, and the examination marking policy. All this information is essential for a potential candidate (e.g., EU student wanting to participate in the Erasmus+ programme). An alternative approach is to provide the links to that information in the Programme Study Guide.

### III. Conclusions

The EEAP overall is satisfied with the synthesis and the quality of the offered courses that constitute the UGP in ECE. Academic staff members are research active and heavily engaged in the Department's administrative and other managing activities as they strive to provide a high-quality programme at both UG and PG levels. The Department have very strong inter-university agreements (MoU) for providing students and academic mobility opportunities

---

<sup>12</sup> Greek Higher Education strategy : [https://www.minedu.gov.gr/publications/docs2016/ΣΤΡΑΤΗΓΙΚΗ\\_AEI\\_-\\_2016\\_09\\_10.pdf](https://www.minedu.gov.gr/publications/docs2016/ΣΤΡΑΤΗΓΙΚΗ_AEI_-_2016_09_10.pdf)

<sup>13</sup> P4Ba\_FINAL TIMETABLE\_UGP ECE\_UoP.pdf

<sup>14</sup> B26.6 Βιομηχανικό συμβουλευτικό συμβούλιο.pdf

within the EU. This should be further highlighted in the Department's mission to strengthen the International visibility of their students and research (it seems it is omitted).

However, the EEAP did not see solid evidence regarding:

- 1) Actions and decision-making resulting from the SWOT analysis to minimise weaknesses and threats and gain from the future foresaw opportunities.
- 2) Student and industry capability to evaluate the industrial placement experience and how these evaluation outputs inform future students. This procedure can facilitate student decisions on internship choices and strengthen their centred learning approaches.
- 3) The inclusion of team-working and group activities within the UGT Programme Study to strengthen students' soft skills.
- 4) The inclusion of academic and research skill activities within the UGT Programme Study to strengthen the development of students' soft skills.
- 5) Approaches/strategies to increase the mobility of students but also academics. Perhaps providing financial motives and awards could help achieve this important aspect - that EEAP identifies as a W on the SWOT analysis.
- 6) Documentation on the PGT student progression and registration was minimal. These programmes should follow the same procedures as the UGT programme and therefore provide the same amount of internal evaluation data documentation.

The Department presented its strategic plan and SWOT analysis. However, EEAP has found those to require further improvement, particularly using the SWOT to generate actions that feed into continuous Annual review and development of its strategy and overall quality assurance practices. The SWOT did not capture the weaknesses reported above.

The presented publication data seemed to indicate a Google Scholar h-index of 5-10 for the majority of its academics. The SWOT did not capture the low (5) index values as a weakness and a strategy to support academics in strengthening their research records.

The future planning and the activities for improvement are not specific or measurable and there is no timeline set; consequently, it is difficult to quantify the success/effectiveness of any actions.

## Panel Judgement

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

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

### **Panel Recommendations**

**R1.1** The Department should review its current procedures detailing its Strategic Planning, Feasibility and Sustainability and incorporate the SWOT analysis into these procedures to achieve a continuous development of its UGT Programme. They should also use SMART Objectives and measurable KPIs that could feed into their IEG to review the effectiveness of any actions.

**R1.2** A detailed minutes/records of IEG's meetings indicating actions/decisions with timelines and their status (ongoing/completed) and members allocated to deliver those (etc.).

**R1.3** A detailed procedure to ensure that aspects related to academic integrity, plagiarism and academic misconduct are added within the Programme Study.

**R1.4** Develop a formal procedure to ensure the effective and active engagement of appointed External Expert Members within the Department's activities required for QAA practices (e.g., review Programme Study and curriculum updates, participate in industrial, scientific, and social activities linked with the Department's national/international visibility).

**R1.5** Develop a formal procedure involving Advisory Board Members and IEG and QUA representatives to review Department's Mission and Vision of the UGT programme in a periodic and systematic approach.

**R1.6** Develop an awards scheme for promoting mobility and Erasmus+ Student & Academic participation.

## 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

Based on the findings from the EEAP during the Accreditation review process and provided documentation as well the QAU of UoPe webpages<sup>15</sup>, it is evident that a QAU of the UoPe interacts with the Department's IEG. However, it seems that QAU is not effectively communicating with the Department, apart from the Course/Module Evaluation Questionnaires (CEQs) data. The quality assurance policy of UoPe must be formulated in the form of a published statement, which all stakeholders implement. EEAP was not given all the QAU statements for the past (four) years, and during the accreditation review, no responses were provided by QAU to justify their actions. The QAU's website provides documentation that reflects the course evaluation statistics<sup>16</sup>. However, these data do not feed back into the SWOT

<sup>15</sup> <https://modip.uop.gr/index.php/ektheseis/ektheseis-esoterikis-aksiologisis>

<sup>16</sup> <https://modip.uop.gr/index.php/ektheseis/statistika-aksiologisis-mathimaton>

of the Department, and it seems to lack critical assessment of the data. For example, the reduced (over the years) PGT student registration. The IEG did not comment on this within their internal evaluation report and SWOT analysis. Furthermore, the summer Semester 2021 report does not include the ECE Department. Another example is the low UGT student response to CEQs. No actions and their effectiveness in strengthening student participation (compared to other years' participation) were reported. The data indicate a significantly low number of student participation. Considering the student registrations, this problem should be mentioned in the SWOT analysis of the Department's IEG and QAU reports. This quality assurance mechanism and year-on-year data analyses should help to identify key aspects (Ss, Ws, Os, Ts) and respond to those systematically (i.e., formulating IEG meetings to discuss those, identify good/poor practices, and take actions that intend to address/respond/improve). Consequently, IEG and Department's QAA mechanisms could have helped the Department establish a long-term (4-year) plan and further improve a Quality Assurance Policy for developing the individual courses/modules and Programme.

## **II. Analysis**

One of the critical challenges in the current modus operandi of the Department and the continuous development of their teaching, research, and social activities is understanding the systematic and period approach of the internal evaluation processes.

Processes are in place and all staff members are experienced academics and active researchers, and it seems to deliver high-quality lectures and labs based on the mean values of CEQs. However, the findings indicate that the processes are not implemented to their full potential. For example, data from CEQs do not summarise the key findings. It is important to have some key conclusions and an executive summary produced by the IEG's reports in a structural approach. An example could be adding an executive summary in the IEG Report (2-5 pages) sectioned into Student Participation, Progression, and Satisfaction; Academic staff unit reviews; Adequacy of existing Infrastructure; Adequacy of KPIs; Mission and Vision Review aspects. Furthermore, adding a conclusion that summarises mainly observations from past practices, the effectiveness of newly implemented practices and new actions to improve quality.

The EEAP found that the Department and its IEG, do not analyse the Student CEQs data to the full extent. There are well-documented internal assessment procedures for the courses that can facilitate a systematic Quality Assurance Policy and ensure its implementation. However, the outputs from these procedures do not clearly indicate the outcomes, decision-making, evidence/reasoning, implementation dates, and people's responsibilities, allowing the Department to review those as a quality assurance measure. The reviewing process of the courses from the Academics who lead and deliver them seems to not feed into the IEG's internal evaluation report. The leading academic should be able to review the adequacy of resources (lecture rooms, lab infrastructure, including literature available in the library), the effectiveness of teaching methods and assessment, and recorded risks and opportunities for improving the course's intended learning outcomes (ILOs). From that review, IEG and Department should be able to formulate a long-term plan for reviewing the UGT and PGT programmes based on a systematic approach. For example, IEG's report does not capture potential risks, if any, (with mitigating actions) and benefits resulting from the new PGT course and its long-term viability. The data from past years indicate a reduction in student numbers on the PGT registrations. Adding a new MSc programme might further reduce the existing programme's registrations, with consecutive risk to its viability.

The Department, in collaboration with QAU, should identify practical and well-defined methods for reporting linking teaching with research, the quality of support services, such as administration, libraries, and student care, that facilitate the implementation of an annual

review of their resources and allow auditing the quality and effectiveness of the existing QAA system of the UGT programme.

### III. Conclusions

In broad terms, the EEAP is satisfied with the Department's adopted quality assurance framework. ECE Department seems well organised and managed and the key overarching mission to offer high-quality UGT and PGT Programmes is largely fulfilled. However, the Department's IEG does not effectively document measurements and analyse data to facilitate the systematic, evidenced-based quality assurance practices. The course review from the leading academic does not clearly summarise student satisfaction, good practices, and any problems that might have appeared (e.g., the pandemic complexing the delivery of the lab). Such documented procedures should be implemented for all the courses at the end of the exam period, and minutes should be kept indicating also student performance.

### Panel Judgement

| <b>Principle 2: Quality assurance policy of the Institution and the academic unit</b> |          |
|---|----------|
| Fully compliant   |          |
| Substantially compliant   | <b>X</b> |
| Partially compliant   |          |
| Non-compliant   |          |

## **Panel Recommendations**

**R2.1** The IEG report should be better constructed, so provide an executive summary and a conclusion section as discussed above.

**R2.2** The IEG should process data ideally in tabulated form for the CEQs as it is done with other data.

**R2.3** Creating a task force to ensure the quality and accuracy of information provided on the website and to the students in English and Greek. Furthermore, this activity/procedure should coordinate with the UoPe QAU to ensure that QAU data for the Department are up to date.

**R2.4** A well-documented procedure should be defined in reviewing/updating a course/module. It should include the academic (involved with the Course delivery) recommendations/suggestions of specific changes, required (hardware and software) infrastructure, how these reflect on Student CEQ key findings and improve the student experience, and how these integrate new research areas. A departmental discussion about proposed changes, available resources and feedback from Industrial partners and local industry on learning outcomes should follow these leading academic course reviews.

**R2.5** Creating a working group task force focusing on increasing student participation in CUQs. This could be a “sub-team” within the IEG that provides, implements and reports on the effectiveness of alternative methods for motivating students to participate in CEQ.

## 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

The ECE Department's UGT Programme has well-defined objectives and is well-structured and comprehensive while maintaining an appropriate program structure. The pedagogical process includes laboratory and programming assignments in several courses that provide valuable lessons for use in the workplace. The new UGT Programme Study was revised and

restructured in 2019. However, small changes, mainly in the course sequence, are implemented every year, indicating the continuous review of the UGT Programme. The academic profiles, the subject areas, the expected learning outcomes and the intended professional qualifications are within the European and National Qualifications Framework for Higher Education and described with reasonable detail, providing the anticipated student workload based on ECTS. The UGT Programme certainly includes elements of the UoPe's and Department's strategy and considers the employment prospects of their graduates. It also provides the option for working experience through student internships. The UGT Programme Study outlines the summary of the courses, and it is clearly structured, comprehensive, and informative.

However, the UGT Programme Study does not provide the learning objectives, expected outcomes, assessment method, and sources of information. Those are provided via different documentation (provided to EEAP, but it cannot be found on the Department's webpages). The Programme lacks flexibility in the first 3 years and additional details on the programme's structure about acquiring specific digital and soft skills. The continuous development of the Courses and the material delivered seems not to change actively. It is not obvious how student CEQs data, Academic reviews and research activities feed into the revision/review of the Courses content and laboratory delivery. The currently established External Advisory Board (EAB) does not effectively participate in the QAA procedure. Out of the 11 Industrial and Social partners the EEAP met during the Accreditation review, no member from EAB was present. This is a clear KPI of an ineffective EAB.

Although the Industrial partners are actively engaged with the Department's teaching activities via industrial placements (and other research and project collaborations), they do not have the means to provide feedback in a systematic way and report on the Programme Study and its effective development of student employability skills, technical expertise, neither can offer recommendations to effectively facilitate the Department with inputs for reviewing the Course ILOs and Programme Study. The Panel understands that the undergraduate program does not receive any formal or informal advice from employers, local authorities and other external stakeholders on the quality of its graduates and learning outcomes.

## **II. Analysis**

The UGT Programme is found to be comparable to other national and international/European Programmes. It is consistent with European standards and ECTS system. Although there is a well-established Erasmus+ program, the participation of incoming and transfer students still needs to be improved. The number of (incoming and outgoing) students taking advantage of Erasmus+ opportunities remain very low. There is a healthy amount of information on Erasmus+ agreements and units that incoming international students can obtain, but it would have been very helpful to summarise some information for the outgoing students and specifically the "how to apply for Erasmus+" information. Perhaps including a small summary of the Erasmus+ agreements and activities on the homepage could help promote mobility. The incoming and outgoing Erasmus students are very good KPIs for quality of services and improving mobility. It seems these are not recorded systematically within the IEG and QAU reports, and no data are collected to understand the reasons for selecting the UoPe and ECE Department (as part of the Erasmus+ options). The institutional strategy articulated and applied in the Department's operations is clearly reflected in the Study Programme. EEAP's reviews during the assessment with the student and industrial partners identified the lack of formal procedure for receiving feedback from graduates and industrial

and social partners on the UGT Programme’s effectiveness and adequacy of soft and technical skill development. This is an essential aspect of programme quality monitoring and continuous development. The UoPe and the Department have Questionnaires<sup>17</sup> for the student to assess their internship experience, data (and analysis) from the questionnaires were not articulated in the IEG and QAU reports.

### III. Conclusions

The Department follows a defined written process involving information sources and the approval committees for their UGT Programme. A healthy number of documented procedures are in place to ensure the program adheres to the principles, recommendations, and regulations related to programme design, approval, and monitoring.

However, the Department should take steps to actively involve participants/stakeholders in the review and evaluation process (for example, by distributing questionnaires to them about changing market needs, key content, learning specific digital, technical and other “soft” skills, etc.). Discussions with representatives from non-academic, public and private businesses can be a valuable source for identifying areas of improvement in the UGT Programme Study. EEAP believes that future curriculum revisions should consider “teamwork and group activities” and include more formal and comprehensive consultation with stakeholders, outside (academic and Industrial) experts, students, and graduates. A well-defined advisory committee procedure should be formed that (among others) describes the responsibilities and expectations of the panel members (alumni and external stakeholders). This should act formally with a well-structured process (recording minutes and decisions). Perhaps as a part of the career affairs days organised by the Department, which could provide the industrial participants with an additional activity to discuss the curriculum.

### Panel Judgement

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

<sup>17</sup> B26.17 Ερωτηματολόγια ΠΑ μέσω ΕΣΠΑ.pdf

|   |     |     |
|---|-----|-----|
| 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

**R3.1** Creating a task force to formulate a process (e.g., questionnaires, interviews, or other instruments) to periodically collect stakeholder recommendations and systematically review the instruments' effectiveness. Furthermore, formulate a list of expected actions/contributions/participation to inform External Experts on activities they need to engage with the Department.

**R3.2** Creating a working group that processes the recommendations produced by various stakeholders, information from Student CEQs responses, and Academic Lead Course review in a systematic approach that feeds into the design, monitoring and review of the Programme quality and ensuring the continuous renewal of material based on Department's research activities.

**R3.3** The Department is an active research environment; however, some strategically important KPIs (e.g., measuring student and academic mobility, staff professional development) should be better defined, and those already in existence should be rationalised in terms of how they have been defined (quantitatively and qualitatively).

## 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 of UoPe is located in Patra and has aspects of a student-focused Education with adaptable learning paths in the final two years of their UGT Programme. The means of evaluation for each course are publicly known and clearly indicated in the course descriptions on the Department's website and seem to be constantly adhered to. In instances where adjustments are needed to be put in place, the students are notified within the initial weeks of lectures.

Contrary to student-centred norms, group projects are not usually implemented as a method of assessment in the courses. There seems to be mutual respect between the academics and the students and the faculty is approachable and accommodating to students' needs and inquiries throughout their studies. Every semester the Department conducts a CEQ. There have been instances where student responses were considered, leading to modifications based on their CEQs comments. However, this is no formal procedure (by the IEG and Department) to provide feedback to the students on any actions taken or omitted with justifications, and perhaps this might be one of the reasons for low student participation to CEQ.

The participation rate in these student satisfaction surveys is under the anticipated level, with rates hovering around 30%. To increase student participation and gain a more comprehensive oversight into the concerns of the students, the Department has put in place

an additional ongoing mechanism for the students to report any issues during the delivery of the course and the leading academic could rectify any potential issues before the end of the semester. This student participation in quality of course delivery input works in conjunction with the well-established end-of-semester survey to get a clearer picture of student issues throughout the semester.

A formal procedure is in place to handle student appeals, including a comprehensive ticketing system and web application to handle any student complaints or appeals. Regulations are in place to outline the role and responsibilities of the academic tutor. The effectiveness of this function is evident from the onset of the student's academic life at the department.

## **II. Analysis**

EEAP discussed with students, academics, operational staff members, local authorities, and businesses and obtained a clearer understanding of how the department functions.

Outside the main course of studies, educators try to bridge the gap of potential basic knowledge deficits of the students through additional preparatory lectures. There have been appeals with students being satisfied with the outcome, which outlines the environment promoting mutual respect and students being able to voice their opinions. The participation rate on the satisfaction surveys raises an essential issue of how many students actually voice their experiences. There seem to be no plans within the Department (changes/reduction to the number of questions, use of paper copies during the laboratories, providing awards or other motives) to promote student participation.

The Department's additional direct student feedback mechanism can inform the leading academics during the semester on potential changes for improving the delivery of the lectures, labs and other learning material. Having a system where students can make formal complaints promotes student-centred learning approaches that directly improve their learning experience to voice their opinions and concerns. The academic tutor seems to be working successfully with students being monitored and guided throughout their academic life to help them succeed.

## **III. Conclusion**

The panel perceives that the Department has considered the majority of essential elements and has been impactful in encouraging students to take an active role and be at the core of the learning process.

## Panel Judgement

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

## Panel Recommendations

**R4.1** The Department should investigate means/methods to promote student participation CEQ and increase student awareness of their role in improving the quality of the course and the Programme Study. CEQs findings should be all analysed officially and propose changes to be considered for the next time. Feedback should be provided to the students with a small summary of actions taken (in the IEG report).

**R4.2** There should be more flexible learning paths for students from the beginning of their studies, allowing them to take a more interdisciplinary approach.

**R4.3** There should be alternative forms of assessment during the studies that should promote the implementation of group projects and other collaborations to help students develop their soft 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**

#### **I. Findings**

The Department organises a welcoming “Engineers Day” event (at the start of the academic year) to facilitate a smooth starting for the new students, introduce them to the Departments and UoPe facilities and provide them with all the information they need for their studies. This provides the students with a glimpse of their academic life in front of them. The Department has an Erasmus office (separate from the UoPe office) on its campus. This is a great service for improving the on-campus student experience; most interviewed students were unaware of it. This also seems to be the case with the Erasmus mobilities both in studies

and internship opportunities. Separate info days just for Erasmus and mobilities are definitely lacking, with the last official info day being before the Covid incident. The bilateral agreements on the UoPe's official website are all expired in 2021. However, the latest Erasmus call on Department's the website, there are seven (7) new bilateral agreements students can choose from. The student statistics for mobilities are also low, with almost 7 out of the 40 interested in participating in a mobility program. A promising aspect is Department's recent participation in the EUNIS European University, which will include in the second phase ten (10) partner universities (one of them being the Department of UoPe).

The department fully complies with the European Credit Transfer and Accumulation System (ECTS), which is used throughout the studies, awarding a master's integrated degree with 300 ECTS necessary to complete the studies similar to all electrical and computer engineering departments in Greece. The UoPe issues a diploma supplement without request upon graduation in both Greek and English for all its graduates. The same applies to this Department.

The industrial internship programme is a significant aspect of this department, awarding five ECTS per month of practical work. Many business partners and research institutions collaborate with this department to help Department's students secure internships. The internships are not compulsory and any ECTS awarded to the students as part of their working experience are not necessary for their successful graduation. The internship under the Erasmus+ is also found lacking in comparison to the ESPA internships. The department has well defined the prerequisites for assigning a thesis and has a comprehensive thesis handbook available. The thesis is being carried upon the final semester awarding 30 ECTS.

## **II. Analysis**

EEAP, during the Accreditation review process over the course of two days, we engaged with students and professors, as well as operational employees, local authorities, and businesses, to better understand the current internship possibilities available for the students. The positions in industry partners and research centres were comprehensive and the relationship of the department with industry for interns seems to be very good. As previously stated, mobilities are not currently encouraged as much but there seems to be a shift in the recent months with new opportunities for students to come in the coming months, such as the acceptance or not for the second phase of the European University EUNICE. The internships funded under ESPA will be fewer for this new department compared to the previous programmes of studies, where the department should start finding funding alternatives for the students looking for an internship to retain the support of practical training as a vital part of the department. Developing an Erasmus network both for internships and studies is vital for the Department to provide new opportunities for its students.

## **III. Conclusion**

The Panel concludes that the Department of Electrical and Computer Engineering has made significant efforts to facilitate Erasmus mobility programs, but it requires a more direct and organised approach to ensure students' participation in mobility schemes. The Department's thesis/dissertations and internships can ensure the development of high-quality graduates. The student progression should also be recorded in a more detailed and systematic manner, indicating the student registration year, the progression in every semester, as well as the cohort (N, N+1, N+2) students in any given year of the UGT Programme belong reflecting numbers for every semester and every course within the semester.

## Panel Judgement

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

## Panel Recommendations

**R5.1** Implementation of blended intense programs<sup>18</sup> for short-term Erasmus mobility between partner schools in order to pique students' interest in mobility and studying abroad without committing to a full semester.

**R5.2** Better outreach and promotion of Erasmus+ mobility and internship and funding opportunities. More comprehensive info days to support students in their decisions on going in mobilities.

**R5.3** Allowing the ECTS awarded by the practical work to replace voluntary courses towards the degree to ensure students retain their interest in doing practical work. Explore funding opportunities for practical work under other schemes outside of ESPA, such as ERASMUS+ funding.

**R5.4** Formulate the systematic mechanism to record and present data with a more detailed per-semester and per-course student progress throughout the UGT Programme.

**R5.5** Updating the current bilateral agreements on the university website to match the ones on the open call.

---

<sup>18</sup> <https://wikis.ec.europa.eu/display/NAITDOC/Blended+Intensive+Programmes+in+KA131+Higher+Education+projects>

## **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 Department consists of 32 permanent academic staff members, 5 specialist academic staff members, and a small number of temporary academic staff. The majority of the staff originates from the merger of two departments within the Technological Educational Institute (TEI): computer engineering and electrical engineering. Additionally, one staff member joined from TEI Larissas and another from TEI Tripolis. Also, it appears that a number of academic staff members will be retiring, and there is currently no plan in place to fill these vacancies.

The recruitment process for permanent academic staff is centralized and governed by Greek government law. The department follows clear and transparent methods to select experts with the necessary education and research qualifications. Temporary academic staff members are sourced from local industries as well as from the pool of local doctoral/postdoctoral graduates.

The academic staff members' curriculum vitae (CVs), demonstrate their extensive expertise in the subjects they teach. The CVs are comprehensive and provide detailed information, including their publications and other research activities. During the evaluation

process conducted by the EEAP panel, the teaching staff provided examples that effectively showcased the strong connection between their research work and their teaching endeavours.

The promotion process for academic staff is commendably managed, with an average of 1-2 staff members being promoted per academic year. The department conducts regular evaluations of the staff, although student participation in these evaluations is minimal. Despite this, the evaluations are conducted satisfactorily, ensuring a fair assessment of the staff's performance.

To anticipate and address any potential issues in teaching, mid-semester questionnaires are administered for courses/modules. This proactive approach helps identify problematic areas and enables timely interventions to enhance the teaching quality and student learning experience.

Furthermore, there is a substantial effort made to align the expertise of the academic staff with the specific areas of specialization they teach. This ensures that the staff members possess the necessary knowledge and skills to deliver the courses in their respective fields effectively.

The Department acknowledges the importance of professional development for its academic staff, even though they did not send any permanent staff on study leave. Additionally, the Department has established around 5 Erasmus+ agreements, with another 5-6 agreements in its final stages as well as a joint programme (in development) with EUNICE University; Despite these agreements, only one academic staff took advantage of a teaching/research trip for professional development. ELKE, the funding body within the University, has not been seen to support any of the academic staff's activities.

## **II. Analysis**

To support the professional development of its academic staff, the Department should utilize the Erasmus+ program and take advantage of the established support provided by ELKE. By leveraging these resources, the Department can offer its staff valuable opportunities for growth and advancement, even in the face of limitations on study leave for permanent staff members.

Engaging in Erasmus+ visits allow academic staff to collaborate with experts in their field, access specialized facilities, and make progress on their research projects. These experiences contribute to the staff's expertise and overall academic quality within the Department.

By actively encouraging and facilitating these initiatives, the Department demonstrates its commitment to nurturing the growth of its academic staff and ensuring their continuous professional development. This, in turn, enhances the department's academic standing and supports a culture of excellence and innovation.

Only a few (1-2) staff members were recruited using open market recruitment practices, somehow limiting the Department's pool of talent skills, expertise and diversity.

Overall, the department's approach to staff promotions, regular evaluations, mid-semester questionnaires, and the alignment of expertise with teaching specializations demonstrates a commitment to maintaining high standards of teaching and fostering continuous improvement in the academic staff's performance.

### III. Conclusion

The EEAP believes that improvements are required, as outlined in the recommendations below. It was also unclear through the Department's SWOT analysis what is the vision and mission and how more measurable outputs and KPIs could be set to facilitate such a long-term strategy.

#### Panel Judgement

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

#### Panel Recommendations

**R6.1** Establish a "Study leave" programme.

**R6.2** Develop and expand development opportunities: ERASMUS+, via ELKE, EUNICE

**R6.3** Develop some KPIs that facilitate improvement in teaching delivery performance, laboratory and other infrastructure utilisation, industrial participation in seminars and PCD schemes.

## 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's campus is in Patra and has one amphitheatre, 12 classrooms and 17 labs that can be used for teaching and several research activities. The infrastructure is of high standards, with the labs and classrooms being in excellent shape. The University has an active Library that students of the Department can use to read and complete assignments as well as great sports facilities for the students. There are dormitories/housing for the students and a student restaurant that covers their needs. The Department has an IEEE student branch as well as several other opportunities for students to participate in and has a plethora of support services such as a psychological care centre online for students called "Wecare" as well as a Student advocate and career support centre, which seems to be residing very far away from the department in Nafplio. Students are generally informed about some of the services available to them. However, there are services that students seem unaware of, such as the Teaching and Learning Support Center and the Career Office, which reside in a different

department. The support staff for the services residing in the department seems to be sufficient.

## II. Analysis

The Department has enough facilities to ensure a high quality of teaching and a plethora of teaching staff and can cover the demanding needs of the degree. The facilities are modern and rationally distributed among the students to avoid congestion and ensure that the spaces are sufficient to promote a better teaching environment for the students. The support services available to the students are numerous and cover a large range, including student welfare, sports, and cultural facilities. Having this department outside of the main campus results in a lack of easy access to some of the available resources and a different mode of use for some others (online instead of on-site). The teaching and support staff is sufficient for the department.

## III. Conclusion

The Department is very efficiently organised, and it provides students with a plethora of facilities, services and activities. While being outside of the main campus of the UoPe poses a serious disadvantage for most of the services, the department has managed well to accommodate its needs and provide as much as it can to its students.

### Panel Judgement

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

### Panel Recommendations

**R7.1** Improve communication of available services to the students.

**R7.2** Expansion plans of the career office and psychologist to the departments in the Patras campus.

## **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 student information within the university is entrusted to a centralized system known as "e-students," which is a commercial software solution. This comprehensive platform efficiently handles both student and staff data, while also facilitating seamless interaction with various departmental systems.

Both the library and departmental office have undergone complete computerization, ensuring efficient operations. The central office systems seamlessly integrate with both the university-wide systems and individual departmental systems. Student complaints are effectively managed through departmental systems, utilizing online forms that are digitally processed. Furthermore, the evaluation of students, staff, and courses, as well as the subsequent processing and analysis of this data, are fully automated, streamlining the entire process.

The university employs the "e-class" system to gather data related to courses, lab exercises, instructions, and student announcements. This system also facilitates the distribution of module materials. Additionally, a comprehensive database is maintained to keep records of departmental equipment. Furthermore, dedicated systems are in place to coordinate module and lab timetables, as well as student catering times, ensuring smooth scheduling and efficient operations.

The campus is equipped with high-speed Wi-Fi connectivity, including the availability of Eduroam. To enhance student convenience, an android application called "MyECE" has been developed, enabling students to access various features such as their calendars, departmental announcements, and student-staff communications, among other functionalities. This

application aims to streamline and facilitate seamless access to essential information and communication channels for students.

## II. Analysis

The systematic collection and analysis of data pertaining to the undergraduate program have resulted in well-organized operations and effective management of study programs and other associated activities. This approach ensures efficient decision-making processes and enhances overall program management. As a newly established 5-year program, there haven't been any graduates yet. Consequently, no data for employability analysis or career paths are available. However, we have full confidence that the existing systems will be capable of effectively managing and analyzing such data in the future.

## III. Conclusion

The Department seems to have in place effective procedures for collecting and analysing information on the operation of Institutions, academic units and study programmes that feed data into the internal quality assurance system.

### Panel Judgement

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

### Panel Recommendations

**R8.1** Develop a task force/working group as a part of the IEG to formulate KPIs and other output data (e.g., student attendance, student progression per course, laboratory adequacy, student satisfaction) and formulate the procedure/tool for analysing those data in a comparative year-by-year approach. This should aim to improve the management of undergraduate programmes of study and related activities but, most importantly, present information in an integrated, more effective and easily accessible way.

## **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**

All the essential details pertaining to the academic unit and study program, including their structure, mode of attendance, assessment criteria, degree conferred, and the curriculum vitae of the teaching staff, can be readily accessed online. The School's website hosts comprehensive course syllabi and an undergraduate course catalogue, both of which adhere to rigorous standards and furnish lucid information regarding course structure and desired learning outcomes. The teaching staff ensure unambiguous expectations are established for each course, and they elucidate the methods employed for course assessment at the outset of every academic term.

The Department actively supports numerous public information activities, including an information day specifically tailored for newly enrolled students, career days, conferences, and other relevant events. These resources and events are conveniently accessible online. The Department's website is thoughtfully designed, ensuring that the information provided adequately meets the requirements for public information in both Greek and English languages. All practical information, such as accommodation details, public transportation options, electronic forms, and more, can be found online. Additionally, comprehensive information about various facilities offered by the University, including the library, laboratories, semester-wise course outlines, examination grading, student mobility programs like Erasmus, and other pertinent details specific to the degree program, are available on the website. Furthermore, the website also features the University's quality assurance policy.

#### **II. Analysis**

The School upholds a website that provides comprehensive online information about all its activities. However, the panel received feedback indicating that certain website sections,

such as the ERASMUS+ program, occasionally experienced delays or inconsistencies in updating and synchronization with the corresponding pages on the UoPe website. It is also evidence that UoPe’s QAU lacks updated reports and up-to-date information. The same applies to the Erasmus+ agreements. Those are not updated on the UoPe web pages.

### III. Conclusion

Information on the Institutions’ activities is useful for prospective and current students, graduates, other stakeholders and the public. The bulk of the Department’s web pages are fine; however, there are inconsistencies between English and Greek pages. Also, the QAU pages of the UoPe need to be updated to provide the most current information. In its current state, the Department of ECE is represented with the old names and reports.

### Panel Judgement

| <b>Principle 9: Public information concerning the new undergraduate programmes</b> |          |
|--|----------|
| Fully compliant  | <b>X</b> |
| Substantially compliant  |          |
| Partially compliant  |          |
| Non-compliant  |          |

### Panel Recommendations

**R9.1** Endeavor to maintain the website's informational content in a current and synchronized state and coordinate actions between UoPe web pages and Department of ECE pages.

## 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**

Based on the information provided by the department, the curriculum of the new UGT Programme on ECE of the UoPe underwent a complete reconstruction due to the merger of the 2 former ATEI schools in 2019. It was based on the 2 ATEI's former courses, which had significant correspondence and were completed with a variety of new courses dully consistent with the Department's objectives and the internationally recognized standards for Electrical and Computer Engineering studies.

The internal evaluation of the UGT Programme of the ECE Department of the UoPe is a periodically repeated process, every 6 months, in which students, academic staff, IEG and QAU participate. According to the information given to the EEAP, 2 evaluations are carried out by the students at the end of each semester through the university's information system, the results of which are used as follows:

1. After completing the exams and submitting the students' grades, each member of the academic staff can look up the information system with personal codes and have an image of his own personal evaluation and the comments of the students.

2. The overall results of the assessment are given to IEG, which prepares an annual report. As discussed with the academic staff and as can be seen from the tabulated data in Section 9.3 of the IEG 2021-22 report<sup>19</sup>, the participation of undergraduate study program students in the evaluation is relatively small. The department informed the EEAP aims to re-design the questionnaire to make its completion easier for the student's response. The Department also uses the e-Class to publish reminders for students to participate in CUQ and provide feedback.
3. EEAP Accreditation report, with the proposed improvement actions, is approved by the Assembly of the Department.
4. An open event is organized at the beginning of each academic year, where the annual evaluation results are presented, and a dialogue-based assessment takes place. The department provided a list of UGP courses where small-scale changes were made and learning outcomes were better articulated based on the internal evaluation process.

Students who met with the EEAP expressed a kind of satisfaction with the evaluation questionnaires, as they already have contributed to short improvements in matters related to the student learning experience, such as the optimization of the announcement time of the program of the examination period, as well as some courses that alternate each semester, without changing their hours or outline.

## **II. Analysis**

The Department's website has 3 internal evaluation reports for the years 2019–2020, 2020–2021 and 2021–2022 (in the English version, only two can be found). Concerning the last IEG report, the QAU evaluation report was also provided, in which highlighted achievements, satisfactory connection with the operational planning of the Department and proposed improvements, were appointed. When the EEAP asked for the missing QAU reports on the 2 first evaluations, the Department informed about procedural (administrational) issues that have to do with the transition of responsibilities to QAU and are not related to the specific department.

At the same time, in February 2021, the department established the "Study Direction Committees" which, among other things, have the authority to make recommendations on the curriculum, making suggestions for improvement. These proposals are then sent to the general assembly of the department for discussion and decision.

Regarding the structure of the UGT Programme, the department informed the panel that the annual internal evaluation results are collected to be used after the end of the current HAHE's academic accreditation by combining them.

## **III. Conclusions**

Considering the new 2019 UGP, the department seems that have followed the appropriate processes to re-examine, redefine and update the curriculum.

---

<sup>19</sup> HMMY – Έκθεση εσωτερικής αξιολόγησης 2021–2022

## Panel Judgement

| <b>Principle 10: Periodic internal review of the new study programmes</b> |          |
|---|----------|
| Fully compliant   | <b>X</b> |
| Substantially compliant   |          |
| Partially compliant   |          |
| Non-compliant   |          |

## Panel Recommendations

**R10.1** Given the low student participation in the CEQ, the panel strongly recommends corrective measures to increase participation. A more detailed questionnaire could offer a powerful instrument for improving the quality of teaching. The department is aware of the issue and investigating methods to improve the completion rate.

## **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**

The Department provided all the records for the Accreditation review process and the EEAP set by HAHE. The Panel is much satisfied with the efforts of the Department's leadership and teaching staff to assist with detailed presentations and the further documentation and evidence they asked for.

During the interviews, the head of the department (HoD), Professor Voros, analysed the importance of this evaluation for the department and gave information on preparing the academic staff for the specific accreditation. The department informed the panel of a strong effort in preparing the file for the accreditation review process by HAHE, also giving the necessary documentary of the active academic staff, informing them and encouraging them to cooperate so that the final material and presentations reflect the reality for the department. It is also to be mentioned that the department used a special software named "basecamp" to enhance the management of the accreditation procedure.

The panel was also presented with a form of "roadmap" for implementing the recommendations of the external evaluation, in which it is noted that the department is committed to consider all proposed changes and take appropriate corrective actions, taking into account its capabilities and resources in collaboration with Quality Assurance Unit (QAU).

Except for formal external evaluation and accreditation from HAHE, the department announced in 2022 the establishment of an "Industrial Advisory Board" with the aim of better connection and cooperation with the industry in Greece and abroad. Through its advisory action, the Industrial Advisory Board, which consists of external experts and stakeholders, will

also offer some form of external evaluation, as its members have long-term experience in areas of interest to the department.

## II. Analysis

The panel is satisfied with the strong effort of the department leadership and teaching staff to assist with detailed presentations as well as prompt responses to every issue raised to facilitate its work.

## III. Conclusions

The new UGT Programme of the ECE department of the UoPe is in full compliance with the principle of regular external evaluations and is under the first official external evaluation by HAHE.

### Panel Judgement

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

### Panel Recommendations

**R11.1** As the department has consolidated international partnerships and operates seven academies of international standards, with the participation of companies such as Cisco, Huawei, Oracle, Microsoft, Google, Deloitte and Fortinet, it will have to pursue its research environment, that could lead to international accreditation, apart from those dictated by the Greek educational system.

**R11.2** The Department should use the existing international partnerships and collaborations that formed the seven academies to ensure that External Experts Panel(s) and Advisory Board(s) members actively participate in Departments QAA activities (e.g., providing recommendations and reviewing learning outcomes and material) to facilitate the continues review and development of the UGT Programme.

## **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**

The department informed the panel and presented the relevant decisions on the correspondences and transitional provisions of the study programs of the 2 former ATEI Departments with the new study program of the Department of Electrical and Computer Engineering. According to them, there is a normal transitional provision to the new ECE Programme Study. There is a clear course correspondence of the Programme Studies, which indicates the additional courses students initially admitted to the 2 former Departments of ATEI must attend to obtain a degree from the new Department. All announcements and related reports, as well as the official “Study Program Matching Guide and Transition Provisions”, are available on the department's website and are easily accessible.

The EEAP was informed by the QAU Report on the course of the transition, in which all the details are mentioned. It also provided a list of academic staff members and their respective qualifications who took courses from the pre-existing PPS that do not map to the new PPS.

As mentioned in the relevant QAU Report and the Programme Study transition, the compulsory 6-month internship of the former ATEIs is not matched with the optional (2-6 months) internship of the current UoPe Programme Study. This optional internship within the new ECE UGT Programme is equivalent to 5 ECTS for each month and to one and up to three six-month Specialty Selection Courses. The department was also submitted evidence within QAU of the UoP Report that converges to the assessment that the graduation of the registered students of the 2 former ATEI is progressing smoothly to the new ECE UGT Programme Study.

The provided documentation with the list of the academic staff contains a lot of information about their research and their qualifications, the fact that fulfils the needs, as well as the leading academic allocation of the courses of the new 5-year UGT Programme.

## II. Analysis

The successful transition of students, programme studies, regulations, and procedures from the 2 ATEIs to the new UGT Programme seems to proceed without significant difficulties.

It is a testament to the department's foresight and effective execution, showing that the administration and academic staff members proactively identified potential challenges and proposed appropriate measures to address them.

There is a lack of data for the most recent years (2021-23) and the QAU seems unable to effectively produce and record documentation associated with the internal QAA findings. The Institutions QAU website seems outdated and relevant information is not publicly available. Although the transition from ATEI to the current ECE UGT Programme is effective and according to the student responses during the review, the lack of documentation is evidenced.

## III. Conclusions

The panel concluded that the UGT Programme Study incorporates all necessary transitional provisions for the former ATEI's students to facilitate their graduation according to appointed Greek regulations. According to the plan, all transition results will be finalised up to September 2027, when the operation of the former 2 ATEIs will end.

Based on the Panel's interview with the stakeholders, the prospect for further/continuous participation of students in their companies is mentioned.

### Panel Judgement

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

## **Panel Recommendations**

**R12.1** Monitoring the transition requirements involves keeping a close eye on the implementation of any changes or new policies that may affect students and faculty. This could include reviewing feedback from students and teachers, conducting regular assessments, and engaging in open communication channels to address concerns and provide necessary guidance. A recommendation for a tough monitoring up to the end of September 2027 is obligatory.

**R12.2** The Department should ensure that processes are in place to facilitate the effective communication with the UoPe QAU. Most importantly, to ensure that QAU provides the Department's IEG feedback on their KPIs adequacy in an annual and systematic manner.

## **PART C: CONCLUSIONS**

### **I. Features of Good Practice**

It is important to emphasise that ECE Department's set of presentations was very helpful and nicely structured to capture individual principles of the Accreditation Report. The presentations were compact with information and their allocated time was far too short to discuss most of the points. It would have been even better if the presentations had more evidence-based points. For example, stating the actions/reasons/approaches for the student-centred curriculum is achieved; providing the procedure for which the Department's mission is formulated; providing minutes from past meetings of IEG with actions allocated and discussed.

EEAP strongly believes that these presentations, with the supporting evidence and minutes of past meetings, should be a national-wide common practice for the accreditation procedure. Other good practices are listed below:

- The annual review of student progress and revision of the Programme Study.
- The “during the semester course delivery” procedure for the students to communicate any problems affecting the quality of the course delivery.
- The successful integration of the past ATEI programme Studies into the new ECE Programme Study.
- The advisor/tutor scheme they offer and the close Student-Academic interactions.
- The Department's excellent infrastructure/facilities for supporting student teaching & learning activities and well-being.
- The level of dedication of the Department's staff towards a student-centred learning Programme.
- The Department's received funding and high-quality research activities.
- The planning and delivery of career fair events to promote student employability and Department activities with Industry.

### **II. Areas of Weakness**

- Incomplete process for the systematic data analysis and processing of the Course Evaluation Questionnaires (CEQ) outputs to meaningful year-by-year qualitative and quantitative KPIs and recording of Courses review actions and their effectiveness to facilitate the Programme's continuous development.
- Insufficient processing and presentation of the data from the CEQs to KPIs and other output data (e.g., student attendance, student progression per course and semester,

laboratory adequacy, student satisfaction) in a comparative year-by-year integrated, more effective and easily accessible way.

- Insufficient and unsystematic process to present and disseminate the information of the CEQ results and actions to students.
- Insufficient and unsystematic process for allocating, monitoring and assessing industrial partners that effectively engage, contribute, review and promote the ECE Programme and Courses.
- Lack of measurable Departmental KPIs on Strategic long-term Planning (Mission & Vision) and comparative analysis with National and International Competitors.
- Lack of documented (i.e., terms of reference) task force and period activities to ensure the Department's web pages with provided public material are continuously reviewed, updated and maintained coherent between the Greek and English versions.

### **III. Recommendations for Follow-up Actions**

- The Department should review its current procedures detailing its Strategic Planning, Feasibility and Sustainability and incorporate the SWOT analysis into these procedures to achieve a continuous development of its UGT Programme. They should also use SMART Objectives and measurable KPIs that could feed into their IEG to review the effectiveness of any actions.
- Ensure that detailed minutes/records of IEG's meetings, actions/decisions with timelines, their status (ongoing/completed), and members allocated to deliver those are kept in a continuous, systematic manner.
- Promote within the Programme Study and Study Guide good academic practices and ethics by ensuring frequent seminars are delivered detailing academic integrity, plagiarism and academic misconduct. By including such teaching sessions in the Programme Study and making them compulsory and examinable with small quizzes, the Department can ensure all students attend, actively participate, and learn about collegiality and ethics.
- Develop a formal procedure to ensure the effective and active engagement of appointed External Expert Members within the Department's activities required for QAA practices, Programme Study National and International Visibility, and Promotion (e.g., review Programme Study and curriculum updates, participate in industrial, scientific, and social activities linked with the Department's national/international reach).
- Develop a formal procedure involving Advisory Board Members and IEG and QUA representatives to review Department's Mission and Vision of the UGT programme in a periodic and systematic approach.
- Develop an awards scheme for promoting mobility and Erasmus+ for both Student and Academic participation and establish a "leave programme" with the aim of internationalisation and CPD of the Staff.

- The IEG report should be better structured. It should include an executive summary and a conclusion section that highlights the main QAA observations associated with the Department's main activities: delivery of the Programme, the adequacy of resources, student participation and progression, industrial engagement, research outreach, and local social engagement.
- The IEG should process data in tabulated form (when possible) for the CEQs and other KPIs that indicate year-by-year progress. This is done in some aspects but not with all KPIs (student performance, satisfaction, and progression are just examples).
- Create a formally structured task force to ensure the quality, accuracy and continuous review of information provided on the website in English and Greek. This activity/procedure should include members from the UoPe QAU to ensure effective communication between the QAU and IEG so data for the Department are up to date.
- A well-documented procedure should be defined in reviewing/updating a course/module. It should include the academic (involved with the Course delivery) recommendations/suggestions of specific changes, required (hardware and software) infrastructure, how these reflect on Student CEQ key findings and improve the student experience, and how these integrate new research areas. A departmental discussion about proposed changes, available resources and feedback from Industrial partners and local industry on learning outcomes should follow these leading academic course reviews.
- Creating a working group task force focusing on increasing student participation in CUQs. This could be a “sub-team” within the IEG that provides, implements and reports on the effectiveness of alternative methods for motivating students to participate in CEQ.
- Creating a task force to formulate a process (e.g., questionnaires, interviews, or other instruments) to collect stakeholder recommendations periodically, systematically review the instruments’ effectiveness, and continuously engage/inform External Experts on activities they need to engage with the Department.
- Creating a working group that processes the recommendations produced by various stakeholders, information from CEQs responses, and Academic Lead Course review in a systematic approach that feeds into the design, monitoring and review of the UGT Programme quality and ensuring the continuous renewal of Courses’ material based on Department’s research activities.
- Some Department’s strategically important KPIs (e.g., measuring student and academic mobility, staff professional development) should be better defined, and those already in existence should be rationalised in terms of how they have been defined (quantitatively and qualitatively). Other should be developed to facilitate improvement in teaching delivery performance, laboratory and other infrastructure utilisation, industrial participation in seminars and PCD schemes.
- IEG should form an activity for reviewing/proposing KPIs (e.g., student attendance and student progression per course, laboratory adequacy, student satisfaction) and develop an effective procedure/tool for analyzing/processing those data in a comparative year-by-

year approach. This should aim to improve the management of undergraduate programmes of study and related activities but, most importantly, present information in an integrated, more effective and easily accessible way.

- The Department’s IEG should also ensure that periodic processes are in place to facilitate effective communication between the UoPe QAU and IEG. Most importantly, to ensure that QAU provides the Department’s IEG feedback on their KPIs adequacy annually and systematically.
- The Department’s IEG should investigate means/methods to promote CEQ student participation, monitor the effectiveness of any corrective measures, and increase student awareness of their role in improving the course and Programme Study quality. CEQs findings should be all analysed officially and propose changes to be considered for the next time. Feedback should be provided to the students with a small summary of actions taken (in the IEG report).
- Students should have more flexible learning paths from the beginning of their studies, allowing them to take a more interdisciplinary approach.
- There should be alternative forms of assessment during the studies that should promote the implementation of group projects and other collaborations to help students develop their soft skills.
- Implement a blended intense program for short-term Erasmus mobility between partner schools to pique students’ interest in mobility and studying abroad without committing to a full semester.
- Better outreach and promotion of Erasmus+ mobility and internship and funding opportunities. More comprehensive info days to support students in their decisions on going in mobilities.
- Allowing the ECTS awarded by the practical work to replace voluntary courses towards the degree to strengthen students’ interest in doing practical work. Explore funding opportunities for practical work under other schemes outside of ESPA, such as Erasmus+ funding.
- Updating the current bilateral agreements on the university website to match the ones on the open call.
- Improve the breadth and the communication of available services to the students. Ensure the development of a “career and well-being” office to provide professional development and health advice on the Patras campus.
- As the department has consolidated international partnerships and operates seven academies of international standards, with the participation of companies such as Cisco, Huawei, Oracle, Microsoft, Google, Deloitte and Fortinet, it will have to pursue its research environment, which could lead to international accreditation, apart from those dictated by the Greek educational system.
- The Department should use the existing international partnerships and collaborations that formed the seven academies to ensure that External Experts Panel(s) and Advisory

Board(s) members actively participate in Departments QAA activities (e.g., providing recommendations and reviewing learning outcomes and material) to facilitate the continues review and development of the UGT Programme.

- Monitoring the transition requirements involves keeping a close eye on implementing any changes or new policies that may affect students’ and faculty activities. This could include reviewing feedback from students and teachers, conducting regular assessments, and engaging in open communication channels to address concerns and provide necessary guidance. A recommendation for periodic monitoring up to the end of September 2027 is obligatory.

#### IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 4, 5, 7, 8, 9, 10, 11, and 12.**

The Principles where substantial compliance has been achieved are: **2, 3, and 6.**

The Principles where partial compliance has been achieved are: **None.**

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

| Overall Judgement       |          |
|-------------------------|----------|
| Fully compliant         | <b>X</b> |
| Substantially compliant |          |
| Partially compliant     |          |
| Non-compliant           |          |

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

## The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

- 1. Assoc. Prof. Konstantinos Kopsidas (Chair)**  
The University of Manchester, Manchester, United Kingdom
- 2. Prof. Costas Iliopoulos**  
King's College London (KCL), London, United Kingdom
- 3. Mr. Sotirios Michalopoulos**  
Member of the Technical Chamber of Greece, Greece
- 4. Mr. Georgios Psaltakis**  
Student, Department of Electrical and Computer Engineering, Hellenic Mediterranean University, Heraklion Crete, Greece