Accreditation Report

for the New Undergraduate Study Programme in operation (Integrated Master) of

Informatics and Computer Engineering

Institution: University of West Attica

Date: 6 January 2023

Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation (Integrated Master) of **Informatics and Computer Engineering** of the **University of West Attica** for the purposes of granting accreditation.

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I.   The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new undergraduate study programme in operation (Integrated Master) of **Informatics and Computer Engineering** of the **University of West Attica** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. **Prof. Sotirios Skevoulis (Chair)**
   Pace University, U.S.A.

2. **Prof. George Angelos Papadopoulos**
   University of Cyprus

3. **Prof. Evangelos Milios**
   Dalhousie University, Canada

4. **Sotiris Michalopoulos**
   Technical Chamber of Greece representative

5. **Mr. Michail Voskakis**
   Hellenic Mediterranean University, Greece (Student Member)

II.   Review Procedure and Documentation

The Accreditation visit took place partially on-site with three committee members attending in person (namely: Evangelos Millios, Michail Voskakis and Sotiris Skevoulis) and partially online with two members joining the visit online (namely George Papadopoulos and Sotiris Michalopoulos). This kind of "hybrid" visit went very smoothly. No events or technical problems were observed during the process of evaluation, which, despite the lack of physical presence of two EEAP members, went according to planning. Technical communication with the University of West Attica and the accreditation panel was well established and never interrupted. The interaction, in technical terms, was of great quality, and the means to guarantee it was suitable.

The main objective of this report is to accredit the Undergraduate Study Programme, to properly consult its members, and to offer respectful, collegial, and truthful advice that may contribute to the programme's future development.

The External Evaluation and Accreditation Panel (EEAP) considered the following documents prior to the online site visit:

- The HAHE Guidelines for the Members of the External Evaluation & Accreditation Panel and Standards for Quality Assurance of Undergraduate Programmes.
- The Template for the Accreditation Report and a mapping grid.
- The Proposal for the Accreditation of the Undergraduate Programme on Informatics and Computer Engineering (Integrated Master) of the University of West Attica
- The Regulations for Undergraduate Studies (Κανονισμοί προπτυχιακών σπουδών) of the Undergraduate Programme under review
- A complete set of module descriptions (Περιγράμματα μαθημάτων) for 2020-21.
- A table of Quality Aims (Στοχοθεσία Ποιότητας), with timeline for their completion.
- The statement of the Department's Quality Assurance Unit (OMEA)
- Quality indicators for the academic years 2017-18, 2018-19, 2019-2020.

During the online visit, additional documents were made available to the panel, namely: A very detailed PowerPoint presentation of the quality assurance procedures of the UWA as well as access to the e-class system for the EEAP committee members to check out course descriptions, lecture slides, assignments and lists of students who took final exams and their grades, and the detailed student evaluation of each course offered in the last academic year.

The documentation provided to the Panel both before and during the site visit was complete, detailed, and clearly organised. The Panel was grateful to the Department for facilitating their task in this way. The site visit conducted partially onsite and partially online via Microsoft teams took place on Monday, Dec. 12, and Tuesday, Dec. 13, 2022. The UWA provided technical support, which enabled the visit to proceed without problems, for which the Panel was grateful. During the site visit, the following hybrid meetings were held:

1. Meeting with OMEA and ΜΟΔΙΠ representatives and ΜΟΔΙΠ staff.

2. Meeting with teaching staff members (ΔΕΠ).

3. Meeting with ten students.

4. A tour of the Department's facilities and the library was provided for the onsite attending EEAP members. At the same time, there was live video capture for the two remotely connected EEAP members.

5. Meeting with employers and social partners to discuss relations of the Undergraduate Programme with external stakeholders.

6. A final meeting with the representatives of the OMEA and MOΔIΠ. The purpose of this meeting was to discuss points or findings that needed further clarification, though the Panel had already been supplied with all the information it needed.

7. The Panel gave an informal presentation of its findings to the Rector of the University, the Dean of the School and the Administrative Head of the University's Quality Assurance Unit (MOΔIΠ), the Head of the Department and members of the OMEA.

The Panel wishes to offer heartfelt thanks to the University of West Attica for arranging and hosting these meetings and for the exceptional spirit of openness and collaboration with which it responded to the queries of the Panel over the course of the two days of the site visit.

III. New Undergraduate Study Programme in operation Profile

The Department of Informatics and Computer Engineering of the University of West Attica Athens is located in the suburban municipality of Egaleo in the western part of Athens. The department started in 2018 and covers the scientific field of Computer Engineering and Informatics. The department satisfies the requirements of the Greek State Law N.4485/2017 in the areas of Information and Communication, database, and Engineering. Currently, it is the only department of Computer Engineering and Informatics in Attica.

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

The program consists of 300 ECTS spans into 10 semesters (five years) of studies, although most of the students usually take longer to complete. Graduates acquire knowledge and skills in informatics, data management, Embedded Systems and IoT, as well as Parallel & Distributed Systems and Networks. As part of their studies students complete either a thesis or an industrial placement or both.

The department has 28 faculty members, 8 laboratory instruction staff (EDIP), 4 special technical laboratory staff (ETEP), 4 administrative personnel, 14 Scientific Scholars and 6 scientific Collaborators (funded by the ESPA Program). The faculty attracts external research funding that enables it to acquire the needed funds for upgrading its infrastructure (including buildings, computing equipment and software). The self-sustained master's programs offer the department annual earnings approximately €400,000.

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

PART B: COMPLIANCE WITH THE PRINCIPLES

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

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

By decision of the institutional Senate, the Institutions should address in their strategy issues related to their academic structure in academic units and study programmes, which support the profile, the vision, the mission, and the strategic goal setting of the Institution, within a specific time frame. The strategy of the Institution should articulate the potential benefits, weaknesses, opportunities or risks from the operation of new academic units and study programmes, and plan all the necessary actions towards the achievement of their goals. The strategy of their academic structure should be documented by specific feasibility and sustainability studies, especially for new academic units and new study programmes. More specifically, the feasibility study of the new undergraduate study programmes should be accompanied by a four-year business plan to meet specific needs in infrastructure, services, human resources, procedures, financial resources, and management systems. During the evaluation of the Institutions and their individual academic units in terms of meeting the criteria for the organisation of undergraduate study programmes, particular attention must be place upon:

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

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

b. The strategy of the Institution for its academic development

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

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

The feasibility of the operation of the new department should be justified based on:
- *the needs of the national and regional economy (economic sectors, employment, supply-demand, expected academic and professional qualifications)*

- *comparison with other national and international study programmes of the same scientific field*
- *the state-of-the-art developments*
- *the existing academic map; the differentiation of the proposed department from the already existing ones needs to be analysed, in addition to the implications of the current image of the academic map in the specific scientific field.*

d. The documentation of the sustainability of the new department

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

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

e. The structure of studies

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

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

f. The number of admitted students

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

g. Postgraduate studies and research

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

Relevant documentation

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

Study Programme Compliance

I. Findings

It is unfortunate that the academic unit does not have control over the number of admitted students. This leads to the admission of almost double the number of students compared to the number of students that the academic unit believes that it can educate effectively, given the human and material resources available. The student/faculty ratio is substantially higher compared with similar departments in North America.

The strategic planning is thorough and complete.

The unit has conducted a SWOT analysis.

The academic unit has established strategic goals and has quantified them, both towards excellence in teaching and research. The strategic goals include extroversion and internationalization, such as strengthening student mobility in the context of ERASMUS+, English language curricula, and contribution to regional development.

An advisory board has been established consisting of academics.

On an upward path since the upgrade of the institution to university status are:

1. The number of research publications
2. the minimum admission grade from the Panhellenic Entrance Examinations, indicating improved quality of the admitted students

The minimum admission grade now exceeds those of comparator academic units in University of Ioannina, University of Patras, and University of the Aegean, indicating that the reputation of the unit among high school graduates increases.

II. Analysis

The unit has significant **strengths**, which include extroversion (collaborations with other institutions within Greece and abroad), an up-to-date curriculum based on the ACM recommendations, a majority of faculty members who are active in research, publications and external funding, very high demand for graduates of an integrated five-year master's by industry, and enthusiasm among faculty and students due to its recent upgrade to University-level status. The unit has some **weaknesses**, including poor tracking and long-term contact with its alumni, poor student/faculty ratio due to a lack of control of the number of admitted students each year, and no immediate replacement of retiring faculty. To cover its

teaching needs, the unit hires contract faculty using funds from the **Partnership Agreement for the Development Framework** (ΕΣΠΑ).

III. Conclusions

The department has performed thorough strategic planning, and has identified weaknesses to work on rectifying in the next few years.

Panel Judgement

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

Non-compliant	
f. The number of admitted students	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

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

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

Panel Recommendations

We strongly recommend the admission of a number of students much closer to the academic unit's assessment.

We recommend that the academic unit include in its strategic planning the research areas to develop in the next five years by targeting the faculty hirings such that it builds on its existing strengths.

We recommend that the advisory board be diversified to include members of the stakeholder community, local industry, public sector organizations, and the Technical Chamber of Greece.

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

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

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

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

Relevant documentation

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

Study Programme Compliance

I.   Findings

The unit has fully implemented a quality assurance policy, which has been posted on the unit's website. The unit has a Committee of Internal Quality Assurance (OMEA), which follows the template of the Quality Assurance Unit of the institution (ΜΟΔΙΠ).
Actions toward the improvement of the quality of the academic content of the program are decided by the General Assembly of the unit.

The handling of student complaints can happen through the submission of a complaints form or by the student contacting the academic advisor (each student is assigned an academic advisor).

The lack of enforcement of a prerequisite structure on student progress through the program leads to anomalies, such as the situation where a much larger number of students is taking a specific final exam of a foundational course than the nominal number of students in the respective year.

II.   Analysis

It was unclear to us how the General Assembly can discuss a very weak student evaluation of the teaching of a course instructor, and refer the instructor to the Office for the support of teaching that exists in the institution (its web page is empty, however). We were told that this matter is discussed with the Chair of the unit, and a new section of the same class is being set up to offer students an alternative and motivate the instructor to improve the course. According to the QAP of the unit, the aggregate results are published.

The complaints form is not clear on how it will be processed, in particular with regard to the protection of the anonymity of the student submitting the complaint. The list of academic advisors of first-year students is posted on the web site, however there is no information on the role of academic advisor and what the students can expect from him/her.

III.   Conclusions

The department has a well-defined Quality Assurance Policy, which includes student evaluations of teaching. Although a wealth of data is collected, it was not clear how such data is exploited to improve the quality of course delivery.

Panel Judgement

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

Panel Recommendations

Please provide your recommendations with regard to issues that need to be addressed, as appropriate.

We recommend that more complete statistics of the student evaluations of teaching be published, in addition to the average, such as the median, and the histogram of the overall evaluations across all courses in a given term. Courses that are well below average need to be closely looked at by a curriculum committee to identify possible design issues with these courses, and their prerequisite structure.

Reduction of anomalies in the student progress through the program must be incorporated into the quality assurance structure of the unit. For example: (a) tracking, and aiming to reduce, the number of times students take a final exam of a course before passing it, or (b) how many terms after the nominal term in the program of a foundational course students pass such a course.

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 Integrated Masters programme is well articulated and comprehensive, with well-defined objectives that follow best national and international practices. The learning objectives, expected outcomes, and sources of information are thoroughly outlined in the Study Guide of the Programme (Οδηγός Σπουδών), and they were presented during the hybrid visit. The Study Guide is clearly structured, comprehensive, and informative. It is updated on an annual basis to reflect changes that have been implemented. The undergraduate programme is not advised formally or informally by employers and other external stakeholders in terms of the quality of its graduates and its learning outcomes, which needs to be addressed.

The programme includes 55 courses which correspond to 300 ECTS credit hours. It has been designed based on the directives of HAHE, IEEE, and ACM as well as surveys on the employment of graduates. It contains a set of core courses and three different tracks («ροές»):

1.   Software & Information Systems
2.   Materials & Computing Systems
3.   Networks & Telecommunications

The programme has also well established and carefully designed expected learning outcomes communicated to the students through the course outlines and the study guide.

II.   Analysis

The program is compatible with the European standards and offers the appropriate number of ECTS units. Because of the Erasmus programmes, the students have opportunities to take courses abroad. However, the number of students who take advantage of these opportunities remains relatively small, partly due to the recent pandemic.

In general, students are satisfied with the degree programme, their interactions with the faculty, and the student life at the three University campuses. They appear to be very eager to have closer interactions with industry and further opportunities to prepare themselves for the labour market (e.g., opportunities to prepare their CVs for their job search).

Overall, students actively participate in the pedagogical process through laboratory and hands-on exercises in several courses that provide valuable lessons to be used in the workplace.

III.   Conclusions

The program is fully compliant with the principles, suggestions, and regulations regarding the processes of design, approval, and monitoring of the curriculum. The department must involve various stakeholders more actively in the review and evaluation process (e.g., by distributing questionnaires to them on the needs of the changing market). The consultation of representatives from non-academic public and private institutions can be a valuable source of experience and inspiration for the programme.

Stakeholders expressed their positive views on the programmes' graduate knowledge and acquired abilities, stating the urgent need of more graduates as they experience a shortage in the labour force. They commented on the dedication of faculty and staff to their success and attested that the programme meets the expectations set by the Technical Chamber of Greece.

Panel Judgement

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

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

- Even though there is a process in the works, the department must move faster toward the establishment of an Alumni Association. It should formalise its alumni network and strengthen its relations with alumni. The Department's graduates pursue successful careers in industry. These alumni could be great ambassadors for its curriculum and research activity. Alumni can help the Department improve its profile, and create stronger professional networks and channels
- Although established links between research and teaching in the undergraduate programme will become more evident as the programme matures, the department should maintain all efforts to further strengthen these links by regularly updating the course contents and providing an additional practical learning experience to students.

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 Computer Science of UWA covers the scientific field of Computer Engineering and Information Technology Computer Engineering. This scientific field is active with hundreds of Informatics departments and Computer Engineering worldwide. The subject of the Department is part of two internationally established scientific fields of higher education, according to the international classification of fields of knowledge in education of UNESCO (ISCED 2013) (Annex B4, par. 1.5) as:

- 06 Information and Communication Technologies 061 Information and Communication Technologies
    - ❖ 0611 Computer use
    - ❖ 0612 Database and network design and administration
    - ❖ 0613 Software and applications development and analysis

- ❖ 0619 Information and Communication Technologies (ICTs) not elsewhere classified
- ● 07 Engineering, Manufacturing, and Construction

  - ❖ 0714 Electronics and automation

providing a high-quality education provision (see Annex B11, par. 4.2), in line with internationally accepted standards, which aims to produce scientists with high-level knowledge, skills and competences in computer, communication and information science and technology.

The Department's strengths include:

(a) its privileged geographical location in Attica, where about 40% of the Greek population resides, and the ensured high demand from prospective students.

(b) its uniqueness in offering five-year engineering studies in the scientific fields of Computer and Information Technology Engineering at the integrated master's level.

(c) the adequate infrastructure and equipment available for the education of its students, and

(d) the proven ability to attract additional resources beyond the regular funding from sources of the Public Investment programme, National and European competitive research and development programmes.

The adequacy of coverage of the Curriculum is completed by the teaching staff of the Department, as it has 29 faculty members, all of whom have research expertise that falls within the scientific field of Computer Engineering and Computer Science.

The newly established Department has Flexible pedagogical methods of teaching and assessment. In particular, Lectures are presented in the lecture halls mainly in the form of presentations. Exercises are carried out in computer laboratories. The asynchronous tele-education platform https://eclass.uniwa.gr/ is presented flexibly. They offer students multimedia material. In particular, they do not adopt interactive approaches to presenting educational material. They fully operate the Living lab (experiential learning) and have combined examination methods (written exams, oral exams, assignments, and e-class exercises (multiple choice). Therefore, young students succeed when what they learn matters to them. In student-centered learning, student interest drives modern education. Student-centered learning allows those involved to decide two things: what material they learn and how they learn it.

The Department conducts a semesterly evaluation of the courses and faculty. The student receives in their institutional e-mail a unique code for participation in the online platform for completing a questionnaire for each taught course. The evaluation form, which is submitted anonymously, includes three subject areas. A) The course with questions on the syllabus,

objectives, teaching material, methodological framework, assignments during data processing, implementation, and implementation in terms of delivery time. B) The lecturer whether they were consistent in organizing, achieving, and analysing well the presentation of the material in the individual lectures while providing encouragement during their studies, the Labs whether they are adequate in practical exercises and with the use of new technologies C) General characteristics of Students whether they are consistent in their obligations such as attending lectures, solving exercises, etc.

There is a course regulation on the department's site as it includes the role and responsibilities for each course introduced in detail to emphasize the acquisition of knowledge, skills, and competencies contributing significantly to the digital transformation of primary production and the economy.

The department has a specific procedure for handling complaints and objections from students during their studies. For examination and grading issues, the student is referred to the course lecturer and has the right to a board examination after three failures. In addition, a signed complaint can be made. Through the secretariat, it can be forwarded to the department chair and, by extension, to the General Assembly or the Legal Department of the department. In addition, there is a separate procedure for dealing with incidents of harassment-bullying by a dedicated Complaints Handling Committee.

II.   Analysis

There was a constructive in-person 2-day conversation with faculty, students, and other staff of the Department and local officials.

Statistical analysis was presented with 40% of incoming students choosing this department within their top three choices for continuing their studies. They also stated that they were aware of the flexible curriculum, several professors from their scientific research, and the special location among other universities nationwide.

The 1st contact was important as the department provided dialogue and exploration of the university with the assistance of the curriculum advisor. An academic advisor was immediately assigned for personal student empowerment and follow-up with the student for any problem they faced during their studies. COVID-19 (2 years) deprived two academic series of students at basic high school knowledge resulting in new students joining the university with several deficiencies. Therefore, all first-semester teachers emphasized the 1st lectures to make up for learning deficiencies from the 3rd grade to be ready at the university level.

The University has skilled and experienced teachers who can use student-centred learning in their classrooms to increase student motivation, help students take ownership of their learning, and build strong relationships.

The department did fully operate the course evaluation system during the pandemic, as evidenced by the high participation rate of about 94% (unfortunately last year was 45%). However, according to the strategic plan the department will implement online assessment of students at the end of the semester in online student grade portal to attract a higher percentage.

A problem arose with a professor in the department, who categorically refused during lectures to increase the bibliographic material in eclass. It was immediately recorded in the evaluation on behalf of the students and was taken up by the Department to resolve it.

III.   Conclusions

The Department of Informatics and Computer Engineering (Integrated Master) of the University of West Attica ensures its undergraduate programme is delivered in a way that encourages students to take an active role in creating the learning process; therefore with regard to Principle 4 it is Fully Compliant.

Panel Judgement

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

Panel Recommendations

- Students must design their own investigation, propose a solution, communicate their ideas to teachers and community members, and evaluate their progress as they go. The teachers help guide this process, but the content, timing, and motivation belong to the students themselves.
- Individual learning plans can also make learners aware of the options available to them in terms of learning and progression. Students exploring for themselves is at the very core of learning. Making discoveries from a task the teacher sets that they are

- genuinely interested in and find challenging, and the feeling they gain from self-direction, is wonderfully rewarding for learners and an incredible life tool.

- Assessment is an essential part of education. Robust assessment processes are critical for a rigorous evaluation of student learning. Beyond judgment, the modes of assessment we select will shape not just what but how students learn. Empowering and engaging learners through assessment design and providing opportunities for dialogic feedback is central to learning and the student experience.

- Modes of assessment are evolving, encompassing assessment for, of, and as learning, allowing the evaluation of a broader range of professional and subject-specific competencies, providing greater student choice and opportunities for students to showcase their talents.

- The academic Tutor ensures departmental compliance with university policies, ensures the accuracy of student records and monitoring, and serves on departmental and university committees.

- Appeals should be considered within a reasonable time and immediately before the end of the academic semester.

- Three ways to think about the role of teachers in student-centered learning are: resources (teachers serve as experts and key sources of knowledge, and students share responsibility for accessing that knowledge), mentors (Strong relationships with trusted adults give students the confidence and motivation they need to take leadership in their learning), and guides (Teachers provide the structure and guidance that enables students to overcome challenges and see how their classwork connects to larger interests and goals).

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

Based on the information provided by the Department, an introduction meeting within the department is taking place each year on a date announced public by the Department Chair. An added value for the students is the meeting recording, giving a sense of freedom to watch or review the desired information on all students, anytime. Additional there is an Academic Advisor designated to advise, guide and help, appointed to each student from the beginning of

the first semester, for the whole period of studies. Very important is the existence of a consultant Professor and of his deputy of the Department, for students with disabilities. There is also a link to a student care web page within the University portal, with all critical information.

Student progress is recorded by the "foititologio", a central university information system used by the Department, giving registration of the score, extracting indicators and data for targeted statistical analysis and further processing by the Internal Evaluation Committee (OMEA), as well as the Department's council.

Student mobility is encouraged by the participation in the Erasmus initiative, as at the beginning of the academic winter and spring semesters there is complete information from the academic advisor. Additional related information is given through a special link for the Erasmus+ program that is available on the website of the department and on the website of the University's ERASMUS office. During the meeting professors and administrative staff expressed particular interest in participating in the skill enhancement mobility programs. It is also notable that during the last three years approximately 55 students spent time in the department from other institutions, increasing the Department's extroversion.

The Undergraduate Studies Program of the department is based on the European system of transfer and accumulation of academic credits (ECTS), as well as on the corresponding Greek legislation, with a minimum of 54 courses to be completed (plus internship) in 5 years. Each course carries a number of ECTS and the student needs to complete a total of 300 ECTS to graduate. The thesis is to be completed in the last semester and carries 30 ECTS.

The Diploma Supplement in both Greek and English is issued without request for all graduates, containing all detailed information for the qualification, the marks received, credits for the corresponding courses and the ECTS-based rating system.

The Diploma Thesis is assigned 30 ECTS. The entire 10th semester of the program is dedicated to the completion of this thesis and the Thesis Regulations Handbook is available online at the Department's website.

Practical training (Internships) has an additional value of 5 ECTS grades (equal to one course). The Department takes advantage of the geographical place within Attica (the largest Greek Region) and the good relationships it has established during past years (since it was founded by the merger of 2 ATEI departments) with a wide network of companies and industries that can offer internships to students. The information provided by the employers and social partners and the meeting of the panel with them assured of the good relationship with the department and its academic staff.

As a lot of company representatives informed the panel of their status as this department graduates, it seems that within the time of internships, they used to have a strong trust approach to the students, as they know their capabilities.

Panel Judgement

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

Panel Recommendations

Department needs to ensure that internships remain a valued offer to its students that could be engaged earlier than the current 8th semester, giving the ability to participate upon the completion of 180 ECTS (a minimum after the 6th semester).

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 teaching staff are recruited via the established procedures by the Ministry of Education, which follow a specific protocol as it is defined by the relevant laws. The same procedures guarantee the transparency of the process.

The Department and the University encourage the professional development of the teaching staff through financially supporting their participation in conferences and encouraging them to take advantage of the Erasmus+ mobility opportunities. The Department is also willing to support taking sabbatical leaves, even though a very small number of the faculty take advantage of this mechanism.

The obligations of the teaching staff comprise teaching with a workload that amounts to an average of 7.2 hours of teaching (ranging between a minimum of 4 and a maximum of 8.75 hours). In addition, there is a considerable additional workload in the supervision of undergraduate and graduate students.

The faculty is currently 28 members strong. All members have research specializations consistent with the Computer Science and Engineering discipline. In addition, the Department employs around 12 more people in the capacity of teaching and lab technical assistants. The academic staff regularly publishes in journals and conferences and the relevant statistics (e.g., h-index, etc.) are comparable to those of the faculty members in other similar Departments.

There is evidence that students regularly evaluate the teaching staff by means of questionnaires, which are filled and returned by a meaningful percentage that is considered realistic and adequate in forming a picture. Interviews with students provided evidence that the quality of teaching is overall satisfactory.

II.   Analysis

The faculty members' expertise is directly related to the Department's needs and currently covers the fundamental areas in which teaching is concentrated. There is evidence that they are all active in research and publish regularly. Based on student feedback, the teaching quality is high.

The linking of teaching with research is acceptable, but the involvement of students with the established research labs can be further strengthened.

There is also evidence of a good level of external funding.

III.   Conclusions

More involvement of the students with the research labs should be developed. The professional development of the faculty should be further strengthened, taking advantage of the sabbatical leave mechanism.

Panel Judgement

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

Panel Recommendations

R6.1 A higher percentage of faculty members should go on sabbatical leave

R6.2 More involvement of students in the activities of the research labs

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 is located in Egaleo Park Campus (Athens). The University aims to continuously modernize its operation with a modern management model and upgrade its infrastructure. In this context, it seeks to acquire modern and integrated IT infrastructure, formulate flexible and practical operating procedures and internal control methods, and continuously evaluate its administrative services' work. Concerning facilities, it aims to rationalise the use and upgrade its premises, expand its building infrastructure, and strengthen the infrastructure and methods of security for its assets, students, and staff.

Ensuring the accessibility of all the spaces and facilities of the Institution and the possibility of full integration in academic activities for students with disabilities is a key priority of the PADA. There are actions such as the quantitative and qualitative improvement of the accessibility of the building structures, surfaces, and spaces of the Institution by students with disabilities, the acquisition and utilization of equipment and other means that allow the attendance of the educational process by people with visual and hearing impairments. The creation of an accessibility unit with specialised support staff, the provision of digital and accessibility equipment to students with disabilities, and a service to support students with disabilities through interpretation were presented.

The Department implements an important quality policy that supports the academic character and orientation of the curricula as it promotes its purpose and scope by implementing the Department's strategic objectives as

1. The high level and quality of studies by international standards.
2. The provision of knowledge with an emphasis on both basic sciences and clinical work through (problem-based learning), alongside the cultivation of critical, creative, and research thinking.
3. Combining depth and breadth of knowledge.
4. Familiarity with cutting-edge areas and conducting laboratory work combined with international-level research.

The department has access to 1 auditorium with a capacity of 200 people (Building K16), 2 classrooms with a capacity of 80 people (Building K16), 4 classrooms with a capacity of 70 seats (Building K16) and 8 educational laboratories, as well as offices for academic and technical staff. There is a planning committee that, at the beginning of each academic year, organizes the timetable, matching student numbers per course and classroom capacity. The teaching areas of the Department are accessible to people with disabilities (wheelchair users). In buildings K16, K10 and K12, where the classrooms and laboratories of the Department are located, there are lifts for the convenience and easy access of disabled professors and students.

The Secretariat of Undergraduate Studies of the Department is housed in building K16 of the Aigaleo Grove Campus and consists of four (4) members of the Administrative Staff, who are specialised, experienced, and continuously trained with the help of the technical staff of PADA in digital skills and administrative practices. They are encouraged by the Administration of the PADA:

- 1) to attend specialised seminars, workshops, and conferences related to the nature of their work,
- 2) to participate in exchange programs for employees through Erasmus Staff Training programs, in training programs from the Institute of Training, the National Centre for Public Administration and Self-Government, in training programs.

Academic staff is in charge of counselling students on academic matters. Every student is allocated a tutor (Advisor professor) who will assist them throughout their studies, addressing any academic or personal concerns that may occur. There are meetings for advising students to select optional courses.

There are sporting facilities (Gym etc.) and social activities (AI social group, Quantum social group, etc). There is a student club, student accommodation, medical services, psychological support services, student advocate, study and computer room, and 3 libraries. Apart from the gym facilities, the University of West Attica offers its students a wide range of sports activities, adapted to their different needs and interests, such as basketball, volleyball, football, chess, table tennis and water polo. In addition, members of the academic community have received National and International awards:

- Basketball (Women's A1 category)
- Volleyball & Beach Volley (Women's A1 category)
- Water Polo (A1 Men's category - 2 students with distinctions in world championships)
- Taekwondo (Student 9th in the World Ranking)

Also, the department has taken several steps to accommodate students, professors and staff with mobility problems, providing easy access.

II.   Analysis

Overall, the facilities at the Department are excellent. The lecture halls are well-designed and well-maintained. The structures are tidy and in good condition. Overall, it is a first-rate teaching and research environment.

The laboratories are very well-equipped. The equipment is modern and up-to-date. The software is frequently updated and maintained. Overall, the laboratories are well-managed and run efficiently for the benefit of the students.

Housing and eating facilities are adequate. The restaurant and the accommodation seem to be well managed. There is a WIFI network that allows the students to work everywhere on the campus.

The administration is run on modern computer systems, and it is effective and well-organized. It offers adequate support to the academic staff and students.

The mobility of students is well coordinated. Students take advantage of the opportunities of ERASMUS+ (with approximately 55 incoming, 14 outgoing students in the last 3 years) to broaden their knowledge and expose themselves to new ideas and approaches. The Department has ensured that there are many agreements in place, increasing the choice of places to visit and topics to be studied.

III.   Conclusions

The Department of Informatics and Computer Engineering (Integrated Master) of the University of West Attica ensures its undergraduate programme has 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 regard to Principle 7 is Fully Compliant. A very well organised Department with excellent planning strategies. Everything seems to be running smoothly.

Panel Judgement

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

Panel Recommendations

- Improve the Wi-Fi speed and bandwidth in underground
- Increase the number of ERASMUS agreements

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 departmental statistics reside on information management systems involved in the gathering, analysing, and utilizing data and information relative to the Undergraduate Program of Study, including:

- The University wide-based MODIP system
- The Departmental information management system including student information system ("Φοιτητολόγιο")

This information network is utilised to serve the academic and administrative needs of the Department. It is also used for Program Quality Assurance and Quality Improvement, for which the Departmental Unit for Quality Assurance (OMEA) and the University Unit for Quality Assurance (MODIP) are responsible. OMEA, the internal evaluation group, analyses the student data and uses this information to improve the performance of students and all teaching personnel. OMEA gathers and inputs data and information in the departmental information system on an ongoing basis about a variety of categories relevant to the Program of Study, such as:

- The instructional and research activities of the faculty members
- The departmental teaching support facilities

- Data on course evaluations by the students
- Student profiles
- Student academic progress

II. Analysis

Easy access to the departmental system is provided to the faculty, students, and staff, all of the data submitted to the departmental system is quantified in the form of KPIs and it is interpreted and used for measurement and assessment purposes. Students are encouraged and presented with the opportunity to evaluate the faculty and support personnel via anonymous surveys. It appears that the student participation rate in the course evaluations reached a peak during the pandemic (hitting approximately 90%) and it has now levelled off at approximately 45%. Employability and career paths of graduates are available through the Career Office ("Γραφείο Διασύνδεσης"). In conclusion, the Panel has found that the programme fully compliant with the Principle.

III. Conclusions

While the course evaluation from students seems to result in high marks, the distribution of scores appears to be skewed. There is a significant number of courses that requires the immediate attention of the department such as:

- Object Oriented Programming

- Algorithms

- Algebra

- Databases

- Calculus I

The above courses definitely require some more attention in the process of extracting useful evaluation results. For example, Introduction to Programming and Object-oriented Programming use C and C++ respectively. These are complex languages that are open to many frustrating pitfalls for the learners. The department may consider more pedagogically appropriate programming languages, for example Python, for these two courses, and defer C and C++ to the operating systems courses.

Panel Judgement

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

Panel Recommendations

- The university alumni/career office is encouraged to prepare methodology and procedures to collect employment data and provide info on career paths and employability of graduates.
- There is a need to carefully examine the results for those courses without just adding them to a general average score. Given the fact that many courses have indeed high scores, the ones with lower scores are masked.

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

The public information about the University and the Department is fully available online, including the study program structure and a thorough view of the teaching staff's CVs. The MODIP quality assurance is up to date and available on the Department's website. Every piece of information appears to be clear, easily accessible, and up to date. Communication with the students is done using a number of mailing lists.

II. Analysis

All the relevant information is available on the website, as far as the Greek version is concerned. However, the English version is inconsistent with the Greek one, and important information is missing (for instance, the link 'Education' Undergraduate link is structured significantly differently from the equivalent Greek link). Moreover, the link from the University site in English points to the Department; after one clicks on it, they get moved to the Greek version. Also, the information regarding the faculty members is not provided consistently (e.g., this link from the Greek part of the website http://www.ice.uniwa.gr/en/emd_person/cleo-sgouropoulou/ leads to the English version, which is not the case with other similar links of other faculty members).

III. Conclusions

The Department has a high standard regarding the public information about the Department and the teaching curriculum in Greek and has put some effort into the English version. The latter, i.e., the English website, needs further work to be on par with the Greek version.

Panel Judgement

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

Panel Recommendations

Update the website for the English version to match the same quality as the Greek version i.e. Study Guide (PDF version), various web pages, course descriptions and prerequisite structure, etc.

Principle 10: Periodic Internal Review of the New Study Programmes

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

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

Relevant documentation

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

Study Programme Compliance

The curriculum of the Department has a duration of 5 years. The Department has recorded as an obligation the Annual Internal Report (Inventory) but up to now, only one Internal Evaluation Report of the department for the Academic year 2019-2020 prepared by the Internal Evaluation Committee (OMEA) and adopted by MODIP by Prot. No. 26/24-11-21. The specific report is not available through the Department's website, nor have students mentioned it, during the meeting with the panel.

Based on the information provided during the meetings there is a new web and mobile platform (the panel was not able to verify that) , that students have the possibility of filing complaints, in addition to the formal process of the evaluation questionnaires, on educational process at course level, performance of the Department and the teaching staff approach.

The Undergraduate Curriculum Committee (EPPS) meets at least once a year. OMEA proposes in writing to the Department committee improvement actions that arise as a need from the

evaluation of the educational work of the teaching staff collects the proposals of MODIP, as well as those of the faculty members, to modify the curriculum. Teaching staff members assured the panel for the reception of the conclusions by email.

Department informed the panel of their decision on the appointment of an Advisory Board (AB) of externals that will be established in the following months and their desire to have a crucial role in supporting the Department's procedures and targets. It seems that it will act as part of an internal evaluation scheme, contributing to the curriculum amendment procedure.

The panel discussed with the EEAP, OMEA and MODIP members, as well as the Rector, the necessity of the presence in the AB of some members of the stakeholders, in order to enhance the partnership of Innovation and Entrepreneurship.

Teaching staff members as well as the participating students assured the panel of specific changes in some laboratories' work and course processions, that took place after the filling of the questionnaires.

The department seems to have a good rate of return of student class evaluation questionnaires and is aware of ways to improve this rate.

Panel Judgement

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

Panel Recommendations

None.

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

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

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

Relevant documentation

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

Study Programme Compliance

The new Informatics and Computer Engineering Undergraduate Programme of the University of West Attica (Integrated Master) at this time is in full compliance with the principle of regular external evaluations. The program was founded in 2018 and at this time, in December of 2022, it is under its first external evaluation, according to HAHE.

 The department provided all the records of the external evaluation of the pre-existing TEI department and the MODIP progress report.

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

 Being proactive is a good sign that the regular external evaluations will continue.

Panel Judgement

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

Panel Recommendations

None.

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

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

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

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

Relevant documentation

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

Study Programme Compliance

I.   Findings

Learning Resources: They are good and appropriate for the delivery and support of the new 5-year program.

Teaching Staff: All faculty members have appropriate academic qualifications for the needs of the 5-year program.

Structured Curriculum: The curriculum is well structured, and it is modelled after Computer Science, Engineering, and Informatics curricula in Greece, Cyprus, Europe, and the United States.

Study Regulations: They are well documented.

II.   Analysis

The current Department of Informatics and Computer Engineering was formed with founding faculty from the previous respective Departments of two TEI. The Department meets the teaching requirements of the new 5-year program.

Practical training and internships were important components of the previous TEI programs. The current program has provisions for such internships, primarily associated with local and regional government offices and the local industry. This transition is in progress, and based on the Panel's conversations with the stakeholders, there is considerable enthusiasm for the prospect of further engaging students in internships that would eventually lead to their recruitment upon graduation.

Study regulations and Department procedures are well documented.

III.   Conclusions

The transition from the previous TEI programs to the new Informatics and Computer Engineering program is in progress with substantial steps done both in the structure, human resources and transition/graduation of students that were enrolled in the previous programs.

Panel Judgement

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

Panel Recommendations

None.

PART C: CONCLUSIONS

I.   Features of Good Practice

- Strong presence within and appreciation by the local community.
- Its unique position in offering five-year engineering studies in the scientific fields of Computer and Information Technology Engineering, at the integrated master's level.
- Adequate infrastructure and equipment available for the education of its students.
- Proven ability to attract additional resources, beyond the regular funding from sources of the Public Investment programme, National and European competitive research and development programmes.
- Readiness to cooperate, self-reflect, and improve.
- Excellent cooperation between the Department and MODIP.
- Collaborative spirit and support among faculty and staff.
- Extroversion (collaborations with other institutions within Greece and abroad).
- An up-to-date curriculum based on the ACM recommendations.
- A majority of faculty members who are active in research, publications, and external funding.
- Very high demand for graduates of an integrated five-year master's by industry and enthusiasm among faculty and students.
- The unit has fully implemented a quality assurance policy, which has been posted to the unit's web site.

II.   Areas of Weakness

- Not very active involvement of students in the labs' activities.
- Few faculty members taking advantage of sabbatical leaves.
- No active involvement of students in the student chapters of ACM and IEEE.
- Need to set up some policy on prerequisites; for instance, a student should pass all prerequisites, before selecting a specialisation track.
- More detailed information available through the English version of the web site.
- Partially developed career placement services due to the short life of the Department.
- Poor tracking and long-term contact with its alumni, and poor student/faculty ratio due to lack of control of the number of admitted students each year.
- No immediate replacement of retiring faculty.

III. Recommendations for Follow-up Actions

- Relations with key stakeholders and alumni should be advanced, forming an advisory board that meets at least annually. The board should be diversified to include members of the stakeholder community, local industry, public sector organisations and the Technical Chamber of Greece.
- Continue to reach out to the public sector and industry for information conducive to assessing expectations and trends and take measures to accommodate them.
- The department is encouraged to continue seeking collaborations with similar departments and institutions to strengthen its research presence.
- We strongly recommend the admission of a number of students much closer to the academic unit's assessment.

- We recommend that the academic unit include in its strategic planning the research areas to develop in the next five years by targeting the faculty hirings such that it builds on its existing strengths.

- Students must design their own investigation, propose a solution, communicate their ideas to teachers and community members, and evaluate their own progress as they go.
- Assessment is an essential part of education. Robust assessment processes are critical for a rigorous evaluation of the level of student learning.
- The academic Tutor should ensure departmental compliance with university policies, accuracy of student records and monitoring.
- Appeals should be considered within a reasonable time and immediately before the end of the academic semester.
- Department needs to ensure that internships remain a valued offer to its students that could be engaged earlier than the current 8th semester, giving them the ability to participate upon the completion of 180 ECTS (a minimum after the 6th semester).
- A higher percentage of faculty members should go on sabbatical leave and more involvement of students in the activities of the research labs.

- Improve the Wi-Fi speed and bandwidth.
- Increase the number of ERASMUS agreements.

IV.   Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 3, 4, 5, 6, 7, 8, 10, 11, and 12.**

The Principles where substantial compliance has been achieved are: **2 and 9.**

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

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

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

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

The members of the External Evaluation & Accreditation Panel

Name and Surname   **Signature**

1. **Prof. Sotirios Skevoulis (Chair)**
   Pace University, U.S.A.

2. **Prof. George Angelos Papadopoulos**
   University of Cyprus

3. **Prof. Evangelos Milios**
   Dalhousie University, Canada

4. **Sotiris Michalopoulos**
   Technical Chamber of Greece representative

5. **Mr. Michail Voskakis**
   Hellenic Mediterranean University, Greece (Student Member)