

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

Accreditation Report for the Postgraduate Study Programme of:

Applied Informatics

Department: Informatics, Computers, and Telecommunications

Institution: International Hellenic University

tion. International Hellenic University

Date: 18 November 2023





Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of **Applied Informatics** of the **International Hellenic University** for the purposes of granting accreditation.

TABLE OF CONTENTS

Part	A: Background and Context of the Review	4
l.	The External Evaluation & Accreditation Panel	4
II.	Review Procedure and Documentation	5
III.	Postgraduate Study Programme Profile	6
Part	B: Compliance with the Principles	7
PRIN	CIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE	STUDY
Prog	RAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT	7
PRIN	CIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES	11
PRIN	CIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT	14
_	CIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES FICATION.	, And
PRIN	CIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES	19
PRIN	ICPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT	22
PRIN	CIPLE 7: INFORMATION MANAGEMENT	25
PRIN	CIPLE 8: Public Information Concerning The Postgraduate Study Programmes	28
PRIN	CIPLE 9: On-going Monitoring And Periodic Internal Evaluation Of Postgraduate	STUDY
Prog	RAMMES	30
PRIN	CIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES	32
Part	C: Conclusions	34
I.	Features of Good Practice	34
II.	Areas of Weakness	34
III.	Recommendations for Follow-up Actions	34
IV.	Summary & Overall Assessment	36

PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the postgraduate study programme of **Applied Informatics** of the **International Hellenic University** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. Dr. Sotiris Skevoulis (Chair)

Pace University, New York City, USA

2. Prof. Marios Mavronicolas

University of Cyprus, Nicosia, Cyprus

3. Prof. Elias Pimenidis

University of the West of England, Bristol, UK

4. Mr. Konstantinos Poulianidis

University of Macedonia, Thessaloniki, Greece

II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) was formed in late October 2023 and received the accreditation support material concerning the Postgraduate Study Programmes (henceforth PSPs) in Applied Informatics as well as in Information Systems a few days before the online visit to the Programmes began on October 30th. All documents (coded A1 – A17) were very well crafted and designed. During the visit, all the participants involved (MODIP, Teaching and Administrative staff) were very prompt to provide us with all the information asked for. All the meetings were conducted online utilising ZOOM from Monday October 30th to Wednesday November 3rd in a very friendly and cooperative spirit. The meetings during the visit were scheduled as follows:

At the welcome meeting, the EEAP met with the Directors of the two PSP, the Head of the Department, MODIP, Steering Committees/ OMEA members to discuss the compliance of the PSP to the Quality Standards for Accreditation. At the same time, the department provided us with access to a video of the facilities and grounds. After the end of this meeting, the EEAP members met in a separate zoom meeting to discuss and reflect on their first impressions and prepare for the next day.

On November 1st , at 15:00 the Panel started a sequence of online meetings that lasted until 19:30. The teleconferences started with the teaching staff members of the PSP, followed by students, graduates and ended with employers/social partners. At the end of this day , EEAP had its last follow-up meeting with the OMEA and MODIP representatives during which additional comments and clarifications were brought up. The EEAP gave a short preliminary verbal report about their impressions and findings of the virtual visit. The EEAP thanked everyone for their participation, cooperation, and virtual hospitality.

III. Postgraduate Study Programme Profile

The Postgraduate Study Programme (PSP) in Applied Informatics was established in 2015 and its first year in operation was the 2015-2016 academic year. It currently has 245 students (both active and inactive) and 200 graduates (alumni). Most of its students (75%) comes from the local area of Serres.

The purpose of the Programme is to educate and train young professionals in applied informatics and provide public and private sectors with well educated professionals. The programme can be completed in 3 (full-time) academic semesters with 8 courses plus a mandatory Thesis for a total of 90 ECTS.

During the first semester students take four core courses (7.5 ECTS each) with a maximum of six advanced elective courses in the second semester (choose four courses to count towards their degree – 7.5 ECTS each) for a total of 60 ECTS coursework. The Thesis is written during the third semester of studies, counts for 30 ECTS, and is defended in front of a committee of three members, one of which is the advisor. Each course is divided into thematic units and taught by more than one professor, each one teaching a unit within his/her specialisation and expertise. At the end of each academic semester the PSP rewards students with exceptional performance with Academic Certificates of Excellence and/or scholarships. Familiarity with active participation in conferences and presentations within academic meetings is particularly encouraged. Currently students have an impressive record of publications. They have published their Thesis work in 15 National Conferences in Greece, 3 International Conferences, 8 academic journals, 4 books and 2 chapters in scientific books.

The academic titles are awarded by the Department of Informatics, Computer and Telecommunications Department of the IHU. The graduates of the PSP can work in the public and/or private sectors in various professional positions in education, software development and as IT professionals.

PART B: COMPLIANCE WITH THE PRINCIPLES

PRINCIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit should be in line with the quality assurance policy of the Institution and must be formulated in the form of a public statement, which is implemented by all stakeholders. It focuses on the achievement of special goals related to the quality assurance of the study programmes offered by the academic unit.

Indicatively, the quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the postgraduate study programme (PSP), its purpose and field of study; it will realise the programme's goals and it will determine the means and ways for attaining them; it will implement appropriate quality procedures, aiming at the programme's improvement.

In particular, in order to implement this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

- a) the suitability of the structure and organisation of postgraduate study programmes
- b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education level 7
- c) the promotion of the quality and effectiveness of teaching at the PSP
- d) the appropriateness of the qualifications of the teaching staff for the PSP
- e) the drafting, implementation, and review of specific annual quality goals for the improvement of the PSP
- f) the level of demand for the graduates' qualifications in the labour market
- g) the quality of support services, such as the administrative services, the libraries and the student welfare office for the PSP
- h) the efficient utilisation of the financial resources of the PSP that may be drawn from tuition fees
- i) the conduct of an annual review and audit of the quality assurance system of the PSP through the cooperation of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU)

Documentation

- Quality Assurance Policy of the PSP
- Quality goal setting of the PSP

Study Programme Compliance

I. Findings

The programme is supported by suitable academic and administrative structures that enable a teaching and learning provision according to the institution's quality framework.

The procedures followed in planning, delivering, and assessing the components of the programme appear to be robust and enable consistency across the academic year and the modules comprising the programme.

Very good student performance and high completion rates suggest that the aims and objectives of the programme of studies are met at a very satisfactory level.

Student satisfaction as to the level of teaching and learning appears to be very high. Successful employment of graduates suggests that the programme meets the objectives of delivering able and well-prepared graduates that address the needs of the workplace.

Employers and other social partners have a high regard for the programme and its graduates.

II. Analysis

The team that delivers the programme comprises very competent members of staff, in academic and technical areas. Most are graduates of well-established Higher Education Institutions (HEIs) in Greece and abroad. They continue to engage with the subject of their studies and research, expand their knowledge and experience and combine it with new and enhanced experiences gained through consultancy and research projects. They invest the outcome of this continuous improvement into their teaching and guidance of the students. Outcomes of individual staff research become elements of teaching or inspiration for coursework and projects. These enrich student learning, improve the ability of students to connect theory to real work practice and help develop the employability of the graduates of the programme.

The structure of the programme and the content of the taught modules are reviewed annually following the end of the teaching and assessment period. Beyond the results of the academic review, it appears that comments and suggestions from student surveys, and those obtained by the social partners are also considered in revising a module. This is considered very good practice that sustains the interaction with all partners of the learning community engaged with this programme. The panel felt that although the engagement of social partners appears to be a very dynamic and beneficial process, it operates rather informally. The programme would benefit from a more formal engagement process through the constitution of an advisory board comprising professionals from the public and private sector, as well as representatives from industry and other big employers. The board could meet once or twice a year, depending on the needs of the programme team. Its members could also be utilised in supporting surveying a wider membership of the professional community by seeking their views on upcoming major revisions of the programme.

The programme team often invites guest speakers from the professional world to complement academic teaching. Suitably qualified professionals are also used as auxiliary lectures in supporting different modules with specialist knowledge. Although some of these external partners have a history of engagement with the department and the programme team, the panel believe that there should be a

system of supporting these staff with their development. This is considered essential in cases where such staff are involved with assessment activities, to ensure consistency and accuracy of the outcomes.

To support a potentially significant increase in student number the programme team should engage in a risk assessment exercise. This will need to be repeated every year to evaluate the impact of student numbers on human, technical, and teaching resources. Relevant discussions on utilising any surplus money earned from student fees to support the development of staff and teaching resources. Also procedures for supporting students that are at the stage of completing their dissertation in presenting their work at international conferences, or publishing journal papers. This will improve the reputation of the programme and that of the department too. At present, most of the above process takes place in a less formal manner. This could be developed in a framework of procedures compatible with the institution's quality framework and concurrent with the aims, and goals of the programme.

Finally, graduates of the programme appear very supportive of the programme, value the knowledge and experiences accrued and have expressed their satisfaction as to the impact the programme has had into their career. The alumni of a programme are considered a valuable resource not only for the programme but the institution too. They could support further developments, create a careers network that will support future graduates, collaborate with the institution in research and consultancy projects, and possibly offer financial support in the form of donations. It will benefit the programme if they were to create a programme alumni group with a formal status, embraced by the programme team and the department. The impact on maintaining and improving the quality of learning and student experience will benefit the programme in growing in student numbers and reputation.

III. Conclusions

Overall the programme team appears to have engaged very well with the institution and the quality assurance body of it. All procedures for developing, delivering the programme, monitoring the outcomes, and evaluating the results appear to be well in line with the institution's quality framework.

Student satisfaction is very high and this supports the further development and expansion of the programme in student numbers.

Social partners appear to value the output of the programme and the impact on employees and services in the region.

The programme team needs to work to further enhance and formalise the procedures for creating and further developing a formal advisory board and an alumni group. These will further support enhancement of the quality of the experience offered to students. This in turn could support the expansion of student numbers and the catchment area beyond the local region.

Panel Judgement

Principle 1: Quality assurance policy and quality goal setting	
for the postgraduate study programmes of the institution and	
the academic unit	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Formalise procedures for creating, maintaining, and utilising an external advisory hoard
- Formalise procedures for creating, maintaining, and utilising a programme alumni group.

PRINCIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD DEVELOP THEIR POSTGRADUATE STUDY PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE POSTGRADUATE STUDY PROGRAMMES. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES AND THE EMPLOYMENT PROSPECTS ARE SET OUT IN THE PRORAMME DESIGN. DURING THE IMPLEMENTATION OF THE POSTGRADUATE STUDY PROGRAMMES, THE DEGREE OF ACHIEVEMENT OF THE LEARNING OUTCOMES SHOULD BE ASSESSED. THE ABOVE DETAILS, AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

The academic units develop their postgraduate study programmes following a well-defined procedure. The academic profile and orientation of the programme, the research character, the scientific objectives, the specific subject areas, and specialisations are described at this stage.

The structure, content and organisation of courses and teaching methods should be oriented towards deepening knowledge and acquiring the corresponding skills to apply the said knowledge (e.g. course on research methodology, participation in research projects, thesis with a research component).

The expected learning outcomes must be determined based on the European and National Qualifications Framework (EQF, NQF), and the Dublin Descriptors for level 7. During the implementation of the programme, the degree of achievement of the expected learning outcomes and the feedback of the learning process must be assessed with the appropriate tools. For each learning outcome that is designed and made public, it is necessary that its evaluation criteria are also designed and made public.

In addition, the design of PSP must consider:

- the Institutional strategy
- the active involvement of students
- the experience of external stakeholders from the labour market
- the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS) for level 7
- the option of providing work experience to students
- the linking of teaching and research
- the relevant regulatory framework and the official procedure for the approval of the PSP 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 Institution's Quality Assurance Unit (QAU).

Documentation

- Senate decision for the establishment of the PSP
- PSP curriculum structure: courses, course categories, ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities
- Labour market data regarding the employment of graduates, international experience in a relevant scientific field
- PSP Student Guide
- Course and thesis outlines
- Teaching staff (name list including of areas of specialisation, its relation to the courses taught, employment relationship, and teaching assignment in hours as well as other teaching commitments in hours)

Study Programme Compliance

I. Findings

Overall the provided procedures for the approval of the program are found to be quite satisfactory. The program certainly provides the students with the opportunity to acquire outside work experience, as documented in the supplied market data regarding the employment of graduates, and this is quite a strong point. Details, however, of the design principles and how those were specifically applied and taken into account during the implementation of the program remain rather unclear. The supplied PSP curriculum structure is satisfactory. A linkage between research and teaching has been demonstrated.

II. Analysis

Official procedures for running, reviewing, regularly updating and improving the study program remain rather elusive. The programme appears to be following unofficial and mostly ad-hoc "procedures" for many, quite significant academic functions. We shall next give a couple of prominent examples.

No formal procedures seem to have been designed and set in effect for the reevaluation of students' graded performance in exams or large-scale projects. It appears that students did not feel a pressing need for such appeal procedures, as it was attested by them that complaints about grading were pretty scarce but were always treated in good faith should they appear. Nevertheless they are a norm in contemporary university education and universities lacking them are usually down looked. In addition, lack of such formal "grievance procedures" cannot help students solidify their belief that they are treated fairly and appreciate the effectiveness of their study program. We found it a bit embarrassing that students had never been accustomed to formal grievance procedures. (See also Findings and Analysis in Principle 3.)

The module descriptions are very detailed in terms of syllabus, schedule of lectures, distribution of weights over the various students' evaluation means, and many more. Oral statements in class of such important issues are complementing the module descriptions.

No procedures of class evaluations on solid and transparent criteria by students appear to have been designed or set in effect. Such class evaluations, which are in effect in most respectable universities, would significantly contribute, in our eyes, to the regular and suitable improvement of the study program.

III. Conclusions

While we are overall satisfied with the design and approval of this PSP, we feel that the need to amend the study program to incorporate the missing issues discussed above is pressing. We are aware of the fact that such amendments need perhaps to be decided uniformly over programs at the university level, rather than approved separately for each postgraduate program. But we also see that each particular

program could easily incorporate the missing issues in its particular "Guide of Studies", and such a settlement would be just good enough as a first step at the moment. We urge the faculty to thoroughly consider and approve suitable amendments to the study program.

Panel Judgement

Principle 2: Design and approval of postgraduate study	
programmes	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

We are aware of the fact that amendments to the PSP of the type described in the Conclusions need perhaps to be decided and established uniformly over programs at the university level, rather than approved separately for each postgraduate program. But we also see that each particular program could easily incorporate the missing issues in its particular "Guide of Studies", and such a settlement would be just good enough as a first step at the moment. We strongly recommend and urge the faculty to thoroughly consider and approve suitable amendments to the study program.

PRINCIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT

INSTITUTIONS SHOULD ENSURE THAT POSTGRADUATE STUDY PROGRAMMES PROVIDE THE NECESSARY CONDITIONS TO ENCOURAGE STUDENTS TO TAKE AN ACTIVE ROLE IN THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in enhancing students' motivation, their self-evaluation, and their active participation in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- respects and attends to the diversity of students and their needs by adopting 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 pedagogical methods aiming at improvement
- regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys
- strengthens 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 the students' complaints
- provides counselling and guidance for the preparation of the thesis

In addition

- The academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field.
- The assessment criteria and methods are published in advance. The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process.
- Student assessment is conducted by more than one examiner, where possible.
- Assessment is consistent, fairly applied to all students and conducted in accordance with the stated procedures.
- A formal procedure for student appeals is in place.
- The function of the academic advisor runs smoothly.

Documentation

- Sample of a fully completed questionnaire for the evaluation of the PSP by the students
- Regulations for dealing with students' complaints and appeals
- Regulation for the function of academic advisor
- Reference to the teaching modes and assessment methods

Study Programme Compliance

I. Findings

The PSP has clearly defined objectives and adheres to the best national and international practices. The program is extensive and focused, maintaining a balance between fundamental and applied learning. The overall structure and

content of the program resemble those of other established global programs. It incorporates a suitable mix of core and elective courses, ensuring depth and coverage of current and emerging topics.

Student questionnaires serve as a vital feedback source for monitoring and enhancing quality. Notably, there is a high participation rate in electronic evaluations, which positively impacts the postgraduate program. Despite the small number of enrolled students, this fosters a personalised relationship between students and professors, leading to high levels of engagement.

Students express appreciation for the professors, noting their consistent availability and helpfulness in providing advice or support. Tutors and staff are perceived as caring and collaborating closely with students for their development and success. According to information from tutors, there appears to be a prevalent "culture of interpersonal rapport" between the two parties.

The program assigns a mentor tutor to each student at the beginning of the semester. However, concerns arise about the potential increase in student enrolment, which may strain current communication dynamics. At present, academic staff is responsive, but a significant influx of students in the future might challenge existing communication channels.

All postgraduate courses and the study guide offer transparent information on course structure and learning outcomes. Faculty set clear expectations and evaluation methods at the start of each semester, typically communicated orally. It is suggested that distributing the syllabus in printed form would be beneficial for students, providing a tangible guide.

Despite discussions with tutors, it's observed that there is no provision for tutorial classes as part of the program, given the relatively small student body and the instructors' ready availability to address issues. Additionally, through student conversations, it becomes evident that there is no formal procedure for filing complaints, such as grade-related issues. Students typically approach instructors and department heads without specific guidance.

Overall, students express high satisfaction with the department's atmosphere and the professors' support. Interviews highlight their contentment with the program, emphasizing the engaging nature of the subjects being taught.

II. Analysis

Some shortcomings affecting Quality Assurance have been identified, requiring attention from the PSP (refer to the "recommendations" section below). Nevertheless, HAHE is confident that, considering the enthusiasm of the academic staff, these weaknesses will be addressed in the most effective manner.

III. Conclusions

An intricately designed Program of Study (PSP), overseen by experienced educators, emphasizes the complex field of Applied Informatics. The potential of the PSP is extensive, skilfully covering a diverse range of subjects necessary to address the constantly changing requirements of the modern marketplace.

Panel Judgement

Principle 3: Student-centred	learning,
teaching, and assessment	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Establishment of proactive planning strategies to tackle potential challenges linked with accommodating a larger student body, aiming to guarantee the ongoing effectiveness and quality of the program.

PRINCIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND CERTIFICATION.

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, THESIS DRAFTING, RECOGNITION AND CERTIFICATION).

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

- the student admission procedures and the required supporting documents
- student rights and obligations, and monitoring of student progression
- internship issues, if applicable, and granting of scholarships
- the procedures and terms for the drafting of assignments and the thesis
- the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and for the assurance of the progress of students in their studies
- the terms and conditions for enhancing student mobility

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

Documentation

- Internal regulation for the operation of the Postgraduate Study Programme
- Research Ethics Regulation
- Regulation of studies, internship, mobility, and student assignments
- Degree certificate template

Study Programme Compliance

I. Findings

The criteria for student selection and the admission process for the Master's program in Applied Informatics are executed through a transparent and standardized procedure, consistent with the practices of most universities. The admission criteria for the program are clearly outlined, and the selection process is well-defined. The stages of academic progression are thoroughly explained in the study guide, serving as a valuable resource for students.

II. Analysis

According to the study guide, students are given the option to pursue part-time studies if they so desire. This flexibility is intended to assist working students in managing their academic commitments more effectively. Also, one issue that emerged during our discussions with the academic staff is their desire to reduce the time it takes for students to complete the program, ensuring that students graduate on time.

It has been observed that there is a delay in the completion of the master's thesis, primarily because many students are employed or have family responsibilities.

Consequently, there is a significant delay in their graduation. This issue is not unique to this program and is prevalent in many universities.

Here, the program could offer an alternative by allowing students with limited time, such as part-time students or those with other constraints, to opt for additional courses instead of a master's thesis, enabling them to avoid the thesis requirement and graduate on schedule.

III. Conclusions

The students express a high degree of satisfaction with the entire process, and the committee is firmly convinced that any challenges that may arise will be effectively addressed by the PSP.

Panel Judgement

Principle 4: Student admission, progression, recognition of postgraduate studies and certification	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- It is recommended to consider implementing a new approach to address the issue of delays in the completion of the master's thesis.
- Specifically, explore the possibility of offering students, especially those with limited time due to work or family commitments, an alternative option.
- The alternative option would involve the ability to substitute the master's thesis with additional courses, allowing students to expedite their progress and complete the program on time

PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE LEVEL OF KNOWLEDGE AND SKILLS OF THEIR TEACHING STAFF, 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 teaching at the PSP, the appropriate staff-student ratio, the appropriate staff categories, the appropriate subject areas, 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 for the PSP 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 (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

Documentation

- Procedures and criteria for teaching staff recruitment
- Employment regulations or contracts, and obligations of the teaching staff
- Policy for staff support and development
- Individual performance of the teaching staff in scientific-research and teaching work, based on internationally recognised systems of scientific evaluation (e.g. Google Scholar, Scopus, etc.)
- List of teaching staff including subject areas, employment relationship, Institution of origin,
 Department of origin

Study Programme Compliance

I. Findings

The EEAP members thoroughly examined the relevant documentation and had extensive discussions with the teaching staff during their meeting with them. Useful information for some aspects was also gained from the meeting with the students. The main findings are presented below:

Selection and appointment of new academic staff makes use of a wide pool of candidates and the procedures used are standard as determined by Greek law. The Programme strictly adheres to the transparent processes outlined by the Ministry of Education. The policies implemented to attract highly qualified academic personnel align with those followed by other similar PSP Programmes. The professional qualifications of the teaching staff are commensurate with the subject matter covered by the degree programme. The teaching load per academic year, which is like other Programmes in Greece and abroad. Teaching load is burdened by Diploma theses supervision and sometimes administrative work. The research performance of academic staff is one excellent. As a result, faculty invest a lot of effort into that with impressive results both in terms of fundamental and applied research (e.g. R&D grants). Linking education with research is actively and successfully done and it

was confirmed by all parties involved (faculty, students, and graduates). The panel, during the meetings, was informed of several examples of linking research and teaching. They make use of research labs linking research topics and practical exercises. The theses completed by the students are almost always connected to a research topic of the supervising faculty members and quite frequently lead to joint research publications in conferences and journals.

The Department conducts regular evaluations of courses and staff performance, and peer review processes are in place among the teaching members.

II. Analysis

The Programme is offered by 6 full-time and 3 part time faculty. Regular student evaluations of the teaching staff are conducted on a semester basis with impressively high participation rates. EEAP noticed that the Programme does not have female academic staff. It is important to note that students unanimously praised faculty for their consistent presence and availability either online or in their offices every day of the week and the strong interpersonal bonds among the various members of the department's academic community. Faculty members are being evaluated by students with the use of digital questionnaires, but they are not offered the opportunity of self-assessment or peer-assessment. The faculty pointed out that bureaucracy and administrative workloads are real burdens in their work and suggested the hiring of additional administrative personnel.

III. Conclusions

The academic staff is qualified to teach the courses of the program. The faculty actively promote the increase of the volume and quality of the research output within the academic unit. The programme should provide incentives to attract female academic staff.

Panel Judgement

Principle 5: Teaching staff of postgraduate	
study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Improve the environment in order to balance the gender distribution of the academic staff.
- Promote and foster innovation in teaching methods, while actively encouraging the utilisation of new technologies for effective teaching practices.

PRINICPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMME. THEY SHOULD –ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARING 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, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient resources and means, on a planned and long-term basis, to support learning and academic activity in general, so as to offer PSP students the best possible level of studies. The above means include facilities such as the necessary general and more specialised libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, IT 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. However, the internal quality assurance proves -on the one hand- the quantity and quality of the available facilities and services, and -on the other hand- that students are aware of 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.

Documentation

- Detailed description of the infrastructure and services made available by the Institution to the academic unit for the PSP, to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding firm commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the PSP (job descriptions, qualifications and responsibilities)
- Informative / promotional material given to students with reference to the available services
- Tuition utilisation plan (if applicable)

Study Programme Compliance

I. Findings

In accordance with the program's official guide, the Master's program in Applied Informatics boasts substantial resources to underpin the pursuit of knowledge and the broader academic endeavour, ensuring that students receive the utmost quality in education. This assertion appears to be firmly substantiated.

After extensive deliberation with the academic faculty, students, and program alumni, unanimous consensus emerged regarding the availability of learning resources and student support, collectively reflecting their unequivocal satisfaction.

Financial sustenance of the program is predominantly derived from students' tuition fees. Concerning the infrastructural aspect, as per the foregoing discussions,

recently refurbished lecture rooms and laboratories are discernibly well-appointed to facilitate the learning process.

Additionally, subsequent to dialogues with students, the committee was apprised of the presence of a readily accessible laboratory open during daytime hours, managed by a dedicated supervisor, prepared for utilisation, both in a physical and remote capacity, should any student find the need to employ it.

With regard to library services, the feedback gathered from students and program alumni has been notably optimistic and encouraging. The library furnishes valuable services to students, resources that are poised to substantially assist them in their academic pursuits and coursework.

Lastly, following exchanges with program alumni, the committee detected a conspicuous absence of a formal networking channel connecting the program and its graduates. This notion found unanimous concurrence among the present students and program alumni.

In all other facets, stakeholders convey their genuine satisfaction with the program, and alumni attest to its pivotal role in significantly enhancing their career prospects and fostering their professional trajectory.

II. Analysis

In the program's study guide, there is a reference to two laboratories, each with a capacity of 20-25 seats. At present, it appears that these seats are sufficient. However, considerations must be made for the scenario of a sudden increase in the number of admitted students. The program should prepare spatially and in terms of equipment for the admission of a larger number of students, as this is, indeed, the future objective.

Another equally important source of feedback for monitoring and quality improvement comes from external partners and graduates. However, this feedback process is based more on personal contacts between professors and external partners. The PSP of Applied Informatics should seek to establish an advisory committee composed of faculty and external partners as well as alumni.

Therefore, it could be feasible to record and monitor the professional journey and success of program graduates, with the aim of establishing potential collaborations in the future. The creation of such an institution should be very beneficial to the graduate program as it will benefit the overall visibility and reputation of the PSP.

III. Conclusions

The PSP seems to offer efficient secretarial services, access to a well-equipped laboratory and library, as well as a modern technological infrastructure. The Committee is convinced that any challenges will be surmounted if the following issues are appropriately addressed.

Panel Judgement

Principle 6: Learning resources and student support	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Establish an advisory committee consisting of faculty, external partners, and alumni, and arrange for it to meet regularly and timely and provide suitable advice on matters related to learning resources and student support and advise the faculty.

PRINCIPLE 7: INFORMATION MANAGEMENT

INSTITUTIONS BEAR FULL RESPONISBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF POSTGRADUATE STUDY PROGRAMMES AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASLILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students.

Reliable data is essential for accurate information and decision-making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on postgraduate study programmes and other activities feed data into the internal system of quality assurance.

The information collected depends, to some extent, on the type and mission of the Institution. The following are of interest:

- key performance indicators
- student population profile
- student progression, success, and drop-out rates
- student satisfaction with their programmes
- availability of learning resources and student support

A number of methods may be used to collect information. It is important that students and staff are involved in providing and analysing information and planning follow-up activities.

Documentation

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

Study Programme Compliance

I. Findings

The programme team has provided appropriate detail as to the means of providing students and graduates to evaluate the programme and its outputs against its advertised targets and objectives.

The format of collecting the data, and the detail and transparency of the reports created provide ample evidence that there are appropriate structures of collecting, processing, storing, and controlling information about the programme's operation, and evaluation of its output by the appropriate bodies within the institution.

What is not clear though is how this information is shared with the external world.

II. Analysis

The panel believes that the programme utilises robust university procedures and systems to capture required personal information of students applying, having been admitted, and registering on the programme. These are stored and processed based on the legal requirements of the country and are maintained according to systems established by the institution.

There are appropriate systems for collecting, processing, and storing details of student assessment and performance, record of achievement and completion of studies. These are conversant to the legal framework of operation of the institution and its internal quality procedures.

The panel was also provided with details of systems capturing student satisfaction at various stages of their studies; at the end of each academic year, and at the stage of completing their studies. Student participation is very high at these evaluation events and despite the rather low number of students registered on the programme the collected data provide adequate clarity of the sense of achievement of the programme. This has been confirmed by members of academic staff, students, and graduates. Evidence has been provided in various documents that have been compiled and made available at the start of the accreditation event. One area that could be more transparent is how these data are used with the public and how it is utilised in verifying the value of the programme and sharing it with potentially interested graduates that might consider applying for this programme. One would expect that the details of Key Performance Indicators and the level of achievement could be made available to the public via the programme's website and this information to be renewed each year. This could demonstrate the real value of the programme to prospective students and also allow the general public to see the value of the output of a publicly funded institution.

III. Conclusions

The programme appears to be observing the institution's quality procedure appropriately where the collection, processing and storage of data relating to student details and performance are concerned.

There could be more transparency in the outcomes of quality surveys and a summary of the views of students captured at various stages of their studies could be made available on the programme's web pages for clarity and openness of information sharing.

Panel Judgement

Principle 7: Information management	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Consider publishing the results of students evaluations on the programme's web pages for better transparency of information.

PRINCIPLE 8: PUBLIC INFORMATION CONCERNING THE POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES RELATED TO THE POSTGRADUATE STUDY PROGRAMMES IN A DIRECT AND READILY ACCESSIBLE WAY. THE RELEVANT INFORMATION SHOULD BE UP-TO-DATE, OBJECTIVE AND CLEAR.

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 PSP they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures applied, the pass rates, and the learning opportunities available to their students. Information is also provided on the employment perspectives of PSP graduates.

Documentation

- Dedicated segment on the website of the department for the promotion of the PSP
- Bilingual version of the PSP website with complete, clear and objective information
- Provision for website maintenance and updating

Study Programme Compliance

I. Findings

The institution's website provides a clear section for the provision and dissemination of information about the programme. This has all the required elements expected of a site to guide students in their decision-making process before applying for admission to the programme.

The specialist web pages offer further information that will support students during their studies.

They also provide details that will allow students and graduates to evaluate the programme and its provision as to the achieved outcomes and the overall value of experience and educational outcomes.

The information offers further details that would be worth reading from the point of view of prospective partners that seek to collaborate with the programme on professional or research programmes.

Although there is a section of information in English, this is much limited and not always consistent with the section in Greek.

II. Analysis

The panel believes that the information presented on the institution's website and the specialist pages dedicated to the programme of studies is a true representation of the information as confirmed by staff, students, graduates, and the documentation provided for this accreditation process.

The panel is pleased to confirm that detail provided as to the structure, module contents, targets, and objectives offers abundant detail to allow a prospective student to make an informed decision to apply to study on the programme. The information included on the programme's web pages also provide valuable

information to guide the students while studying, to plan their personal, work, and family commitments in synchronisation with the commitments to their studies.

There is suitable information that allows the students to evaluate the result of their educational experience during their studies. It also allows graduates to draw conclusions on the educational and professional value obtained at the end of their studies and to measure the impact they have had on their professional careers.

The information presented addresses all the requirements by the quality systems of the institution and is compliant to such systems.

Although the programme is addressed to Greek speaking students there is a requirement to provide compliant information in English too. The content presented in English is not of the same detail and in some sections not current. It does not provide enough clarity to a reader. Furthermore the quality of the text provided in English could do with much improvement. Although it is highly unlikely a non-Greek speaking student will be interested in the details of the programme, there could be Greek speaking students studying in other European institutions that could be attracted to join part of the taught programme as exchange students. This will certainly benefit the institution and the programme opening news avenues for collaboration beyond teaching, such as research. The authorities at the reciprocating institutions would like to see abundant detail about the programme, before allowing their students to proceed with an exchange application.

III. Conclusions

The information provided in the programme's web pages on the institutional web site is detailed, adequate and appropriate for its purpose where this is presented in the Greek language.

The English version of the web pages is limited and could do with improvements.

Panel Judgement

Principle 8: Public information concerning the postgraduate study programmes	
Fully compliant	
Substantially compliant	х
Partially compliant	
Non-compliant	

Panel Recommendations

Improve the structure and detail of the content provided in the English version of the programme's web pages to match that of the ones in Greek.

PRINCIPLE 9: On-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS AND ACADEMIC UNITS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR POSTGRADUATE STUDY PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND POSSIBLE AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

The regular monitoring, review, and revision of postgraduate 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:

- a) the content of the programme in the light of the latest research in the given discipline, thus ensuring that the PSP is up to date
- b) the changing needs of society
- c) the students' workload, progression and completion of the postgraduate studies
- d) the effectiveness of the procedures for the assessment of students
- e) the students' expectations, needs and satisfaction in relation to the programme
- f) the learning environment, support services, and their fitness for purpose for the PSP in question Postgraduate study 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.

Documentation

- Procedure for the re-evaluation, redefinition and updating of the PSP curriculum
- Procedure for mitigating weaknesses and upgrading the structure of the PSP and the learning process
- Feedback processes concerning the strategy and quality goal setting of the PSP and relevant decision-making processes (students, external stakeholders)
- Results of the annual internal evaluation of the PSP by the Quality Assurance Unit (QAU), and the relevant minutes

Study Programme Compliance

I. Findings

On paper, there are well-defined (but not as systematic as we would expect) procedures for monitoring, internal (re)evaluating and possibly updating the PSP curriculum, which seem to be followed with care. It would be much beneficial, though, if these procedures were summed up, coded and included in the Study Guide so that students know from the very beginning of their studies in this PSP how and when to contribute to potential updates of the curriculum.

II. Analysis

No documented weaknesses were found regarding the presented strategies for monitoring and the (re)evaluation of the PSP program. We feel, however, that there is some room for systematising, disseminating to interested parties and improving the procedures for monitoring and internally (re)evaluating the PSP program.

III. Conclusions

A timely plan for studying the results of the internal evaluation and implementing any decided actions (as resulting from on-going monitoring and internally (re)evaluating) to mitigate any possible weaknesses is currently missing.

Panel Judgement

Principle 9: On-going monitoring and period evaluation of postgraduate study programmes	lic internal
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

We recommend that the PSP timely and regularly prepares and disseminates (by posting and communicating to the appropriate parties) an updated plan for the decided actions of improvement.

PRINCIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES

THE POSTGRADUATE STUDY PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY PANELS OF EXTERNAL EXPERTS SET BY HAHE, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

HAHE is responsible for administrating the PSP accreditation process which is realised as an external evaluation procedure, and implemented by panels of independent experts. HAHE grants accreditation of programmes, based on the Reports delivered by the panels of external experts, with a specific term of validity, following to which, revision is required. The quality accreditation of the PSP acts as a means for the determination of the degree of compliance of the programme to 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.

Documentation

 Progress report of the PSP in question, on the results from the utilisation of possible recommendations included in the External Evaluation Report of the Institution, and in the IQAS Accreditation Report, with relation to the postgraduate study programmes

Study Programme Compliance

I. Findings

Overall we rate the written procedures for the external evaluation of the PSP as satisfactory and complying to the Principle.

II. Analysis

It is understood that the PSP is very much willing to take all necessary actions to implement all suggested improvement steps. We count very positively this responsiveness of the leading faculty to suggestions for improvement.

III. Conclusions

We suggest that the improvement steps themselves, which may be periodically updated, should be also periodically re-evaluated **themselves** and checked for their effectiveness towards the progress of the PSP.

Panel Judgement

Principle 10: Regular external evaluation of postudy programmes	ostgraduate
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None.

PART C: CONCLUSIONS

I. Features of Good Practice

- The fine detail of the module descriptions is truly impressive.
- The program is supporting the students by providing the opportunity to acquire outside work experience.
- Very good information detail on website that provides good guidance to current students.
- Very good student engagement and excellent levels of student satisfaction.
- Very good staff research activity and integration with teaching
- Potential for growth with online delivery.
- Immediate responsiveness from the administrative office as well as the educational staff towards students' inquiries and service.
- Flexibility for part-time enrolment is available for working students

II. Areas of Weakness

- Overall and across principles, it appears that there is a systematic lack of formalisation, coding, timeliness and regularity of procedures and actions. It should be better appreciated by the leading faculty that even the best formalisation of principles on paper may not succeed as much as it deserves if it is not accompanied by an as good formalisation of procedures and actions.
- Links with industry and social partners depend mostly on interpersonal relationships and are restricted to locality.
- Limited student catchment area
- Insufficient flexibility for employed students to bypass the completion of a dissertation.
- Limited integration of the postgraduate program with its alumni network.

III. Recommendations for Follow-up Actions

- Formalise procedures for creating, maintaining, and utilising an external advisory board.
- Formalise procedures for creating, maintaining, and utilising a programme alumni group.
- Amendments to the PSP of the type described in the Conclusions need perhaps to be decided and established uniformly over programs at the university level, rather than

approved separately for each postgraduate program. It is strongly recommended and urgent for the faculty to thoroughly consider and approve suitable amendments to the study program.

- Establishment of proactive planning strategies to tackle potential challenges linked with accommodating a larger student body, aiming to guarantee the ongoing effectiveness and quality of the program.
- It is recommended to consider implementing a new approach to address the issue of delays in the completion of the master's thesis.
- Specifically, explore the possibility of offering students, especially those with limited time due to work or family commitments, an alternative option.
- The alternative option would involve the ability to substitute the master's thesis with additional courses, allowing students to expedite their progress and complete the program on time
- Improve the environment in order to balance the gender distribution of the academic staff.
- Promote and foster innovation in teaching methods, while actively encouraging the utilisation of new technologies for effective teaching practices.
- Establish an advisory committee consisting of faculty, external partners, and alumni, and arrange for it to meet regularly and timely and provide suitable advice on matters related to learning resources and student support and advise the faculty.
- Improve the structure and detail of the content provided in the English version of the programme's web pages to match that of the ones in Greek.
- A timely plan for studying the results of the internal evaluation and implementing any decided actions (as resulting from on-going monitoring and internally (re)evaluating) to mitigate any possible weaknesses is currently missing.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 1, 2, 3, 4, 5, 6, 7, 9, and 10.

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

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

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

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

The members of the External Evaluation & Accreditation Panel

Name and Surname Signature

1. Dr. Sotiris Skevoulis (Chair)

Pace University, New York City, USA

2. Prof. Marios Mavronicolas

University of Cyprus, Nicosia, Cyprus

3. Prof. Elias Pimenidis

University of the West of England, Bristol, UK

4. Mr. Konstantinos Poulianidis

University of Macedonia, Thessaloniki, Greece