Accreditation Report
for the Postgraduate Study Programme of:

Human-Computer Interaction

Department: Electrical and Computer Engineering

Institution: University of Patras

Date: 17 December 2024

Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of **Human-Computer Interaction** of the **University of Patras** 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 postgraduate study programme of **Human-Computer Interaction** of the **University of Patras** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. **Prof. Sotiris Skevoulis (Chair)**
   Pace University, New York, USA

2. **Prof. Marios Mavronicolas**
   University of Cyprus, Nicosia, Cyprus

3. **Dr Fivos Andritsos**
   European Commission, Joint Research Centre

4. **Prof. George Aggidis**
   Lancaster University, UK

5. **Eleni Kamateri**
   International Hellenic University, Thessaloniki, Greece

II. Review Procedure and Documentation

The Hellenic Authority for Higher Education (HAHE) organized the External Evaluation and Accreditation Panel (EEAP) that conducted an online accreditation review of the graduate program in Human Computer Interaction. The review process included meetings and briefings via Zoom. Prior to these meetings, EEAP received the schedule with Zoom links and extensive materials from the department and university. During the initial meeting, EEAP members discussed the review strategy and assigned tasks. Additional documents and presentations were requested and provided by the department during and after the meetings.

The review began on Monday, December 9th, 2024, with an introductory meeting among EEAP members, followed by teleconferences with the Vice-Rector/President of MODIP and the Department Head. The day continued with a detailed presentation on most of the 12 evaluation principles by the department's faculty and staff. After that, EEAP met with teaching staff, laboratory staff, and a few students. The evaluation included an online tour of the department's facilities and meetings with employers and social partners. The review concluded with a debriefing session involving departmental faculty and staff, the department head, the vice rector, and MODIP members. HAHE provided a detailed schedule of the review and participants.

In the following days, EEAP members worked on key findings, both independently and as a team, from December 10 to December 14. They appreciated the cooperation from the department and university. Follow-up meetings were held via Zoom to finalize the Accreditation Report.

III.   Postgraduate Study Programme Profile

The interdepartmental PSP in Human-Computer Interaction was established in 2018 and at that time it was the first and only such program in Greece. The PSP endeavors to advance the software and systems industry globally and domestically by developing specialized professionals with expertise in Human-Computer Interaction (UX/UI experts). Main goals of the program are to expand its international presence and to deliver top-notch theoretical and practical education in designing interactive systems, incorporating the latest technological advancements.

The graduates of the program can pursue careers as UI/UX Designers and Developers, focusing on creating and implementing user interfaces (UI) and ensuring smooth user experiences (UX) for web, mobile, and Virtual Reality (VR) applications. They can also work in research and development (R&D) as researchers in cutting-edge fields such as human-robot interaction, brain-computer interaction, augmented reality, and ubiquitous computing.

The coursework spans over 3 semesters and it is worth 90 ECTS. The first two semesters students take 5 courses - 30 ECTS (for a total of 10 courses – 60 ECTS). The 5 courses include two compulsory courses and three elective courses. The third semester covers the Dissertation - 30 ECTS.

Since its official start in 2019 it has accepted 49 students in total. It is a trueinterdisciplinary program with 18 Faculty members that come from 7 different departments/ 4 Universities. Namely: from the University of Patras the departments of Electrical and Computer Engineering (ECE), Computer Engineering and Informatics (CEID), Mechanical and Aeronautical Engineering (MEA) and Management Science and Technology (MST), National Technical University of Athens – Ergonomics Lab and the Hellenic Open University.

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 host institution, the School of Engineering of the University of Patras, hosts two separate departments with very similar and overlapping application fields: the Electrical and Computer Engineering Department (ECED), evolution of the Electrical Engineering, the first engineering department founded back in 1967, and the Computer Engineering and Informatics Department (CEID), founded much later, in 1979.

The Master Program in Human-Computer Interaction (HCI) is run jointly by these two departments, coordinated by ECED. A number of other institutions also participate in the PSP, namely the Dpt. of Mechanical and Aeronautical Engineering, and the Dpt. of Management Science and Technology of the University of Patras as well as the National Technical University of Athens, the Hellenic Open University, and the Ionian University. The PSP has been running since 2018, the first cohort of students enrolling in the academic year 2019-2020.

The objective of HCI is the study, design and development of interactive technologies and, more generally, the phenomena related to the interaction with modern technologies. It mainly targets graduates in Computing and Informatics but it is open also to other graduates with a sufficient IT background. It aims to extending their knowledge and skills so as to render them.

capable of designing innovative interactive technologies so as to provide relevant services to research and industry in the public or private sector in Greece and internationally.

The HCI PSP academic and support staff are well-qualified and seem passionate in their duties, which they perform without any special or additional retribution. The same is true about the small PSP student body.

In terms of laboratory equipment and teaching facilities, HCI PSP leverages on the two UoP parent departments.

II. Analysis

The Human-Computer Interaction PSP has all the prerequisites to fulfill all HAHE requirements, as listed in points (a.) through (i.) above. This is due to the quality and professionalism of all teaching and support staff as well as the well-established quality policy, procedures and support services of the host institution.

One concerning point, which however is beyond the current certification process, regards the involvement of two separate departments with very similar, overlapping fields of application. This is reflected also in the fact that most PSPs of the two departments are common. Nomatter the good will of the academic and support staff, this situation risks creating conflicts, additional bureaucracy and suboptimal resource utilisation.

The HCI PSP is very well structured and covers some very important modern IT fields. It is focused and offers substantial additional knowledge to IT professionals.

The main concern regards its rather limited size, in terms of enrolled students. This is due to the fact that the PSP targets incoming students who already have an integrated master and who have no difficulties in finding good jobs in the current Greek or international IT job market.

The root causes of the above mentioned issue are well-addressed in the PSP quality, planning, strategy and goal setting documents. However these documents stop short of proposing any effective solutions. The HCI PSP management should be commended for not dropping their standards in order to attract less qualified incoming students. Nevertheless, the Panel is of the opinion that, with such a small number of students, the PSP's sustainability may be at risk.

The laboratory equipment and teaching facilities are those of the two UoP parent departments and are just sufficient for the basic HCI functionalities.

III. Conclusions

The Human-Computer Interaction PSP fulfills all HAHE requirements, as listed in points (a.) through (i.) above.

The HCI PSP management and the host Institution must take some measures to substantially increase the incoming student base without sacrificing the focus or quality of the PSP. It is evident that, in the current higher education offering and job market conditions, this can only be achieved by extending HCI's offering to graduates from non-IT or non-engineering institutions. In order for the PSP to preserve its focus and quality, it could condition such offering to the obligation to follow, perhaps during an additional introductory semester, some undergraduate courses at the ECED or CEID departments.

Finally, the introduction of some reasonable fees, coupled with the extension of the incoming student base, could provide HCI some means to further ameliorate its offering through specialized guest lectures or, specially, additional lab and RTD equipment like simulators, VR tools etc.

A dedicated workshop could contribute towards an updated tactical and strategic plan, possibly extending towards novel HCI applications like medical, industrial, agricultural, military etc. Examine the possibility to extend towards new collaborations and HCI fields like the effects of the extensive IT use on the persons' psychology and social behavior.

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	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

R1.1 Extend HCI's offering to graduates incoming from non-IT institutions, eventually conditioning such offering to the obligation to follow selected courses of the ECED or CEID departments perhaps during an additional introductory semester.

R1.2 Consider the introduction of some reasonable fees that would serve to further develop HCI's offering.

R1.3 Enhance further the laboratory and RTD equipment.

R1.4 Organise a workshop dedicated on the HCI of the future, also tackling items P1.1-3 above.

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

The development and subsequent implementation of the PSP have been guided by Patras University Engineering School relevant policies, following a clear and well-defined procedure. The PSP is backed by an adequate sustainability analysis which promptly maps relevant risks and opportunities. The PSP identified correctly the main risk, which has to do with the rather low PSP demand.

The courses are offered by teaching staff who are experts in their respective areas. There seem to be a number of links with relevant laboratories and research groups mainly within the Patras University but also with other Institutions like NTUA etc. The links with Industry are rather limited, mostly with software companies developing web interfaces mainly for the Greek public sector. Apparently, concerning the interaction with Industry, the PSP mainly relies on the fact that most of its students already work and, thus, are in a position to provide good feedback. The PSP has tried to collaborate directly with Greek authorities in the eGovernance field without success.

The programme is well-designed, in line with the European Qualifications Framework (EQF) Level 7, thereby ensuring advanced academic and professional knowledge, skills and competences. The student workload also seems to be in accordance with the European Credit Transfer and Accumulation System (ECTS) for Level 7. The PSP documents adhere to the Institution's general policies and that the relevant regulatory framework and, apparently, all official procedures for the approval of the PSP by the Institution have been followed.

II. Analysis

The need for the PSP's graduates is clear. The Panel is satisfied with the quality of teaching, the level of specialization and the variety of the offered courses. The small size of the PSP allows for a modern, student-focused approach both to teaching and assessments.

The main concern of the Panel, as mentioned also in P1, regards the rather limited PSP size, namely in terms of enrolled students. The root causes of this issue are well-addressed in the PSP quality, planning, strategy and goal setting documents, which, however, stop short of proposing any effective solutions. If some effective measures for increasing the number of incoming students are not taken, the PSP's sustainability may be at risk. Recommendations P1.1 and P1.4 may contribute to that end.

The limited number of students, coupled with the dedication and availability of academic and support staff allows for effective informal communication and feedback. Understandably, this has caused a certain relaxation of formal communication and feedback mechanisms.

III. Conclusions

The Panel is generally satisfied with the PSP's design and approach towards the educational aspects covering Principle 2. It is well-designed and benefits from its host Institution's tradition, strategy and services, the only negative point having to do with the coexistence of

two separate departments with similar, overlapping application fields that risks creating conflicts, additional bureaucracy and suboptimal resource utilisation.

The substantial increase of the PSP's incoming student base is, as identified in the PSP's documents and mentioned also under Principle 1, is of vital importance in order for the PSP to achieve sustainability. Under such a perspective, the PSP should strengthen the formal communication and feedback procedures both with its students and with its stakeholders. The establishment of a formal advisory group would be a step towards such a goal.

Panel Judgement

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

Panel Recommendations

R2.1 In view of a substantial increase of its incoming student base, the PSP should strengthen the formal communication and feedback procedures both with its students and with its stakeholders.

R2.2 The PSP should establish a formal stakeholders' advisory board including representatives from Industry and Government.

R2.3 The host Institution should take care to rectify the situation of having two similar, largely overlapping departments (ECED and CEID) for the benefit of its graduate and postgraduate offerings.

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 student assessment of the PSP program is largely positive, considering the student and alumni interviews, as well as the student responses to evaluation questionnaires. Students report that they have been supported in terms of teaching and learning process and been aware of the assessment criteria. Moreover, their preferences and background have been

taken into account to the entire learning procedure, including the individual/team projects and the final thesis.

A minor concern is that the PSP programme is not very flexible for active professionals. More details are discussed below.

In addition, concerns arise regarding the formal process for handling student complaints.

## II.	Analysis

Interviews with students and alumni revealed that the faculty effectively address the diverse learning needs of students by adopting flexible learning paths tailored to individual backgrounds, career goals, personal aspirations and preferences. Students noted that their professors are very knowledgeable, bringing to the classes the latest technological advances and trends followed in their field.

Given the programme's appeal to active professionals or students taking up a job during their studies, it is strongly recommended for the PSP to adopt more flexible teaching paths, like implementing some of the courses fully or partially remotely. Moreover, it is advisable to implement the courses in a more intense timeline out of business hours e.g., evenings and/or weekends.

Students also note that there exist some overlaps with under-graduate courses. This may be problematic for students attending the program with a first degree from the two departments facilitating the programme. Hence, it would be advisable in case of similar disciplines with undergraduate courses to adequately differentiate the topics (over 40%) covered by the PSP courses, focusing on advanced themes.

Moreover, some courses are given to undergraduate and PSP students at the same time. At these cases, the learning process of undergraduate and PSP students is completely different following a distinct learning methodology and assessment process. In general, the co-teaching of post and undergraduate courses is not an optimal pedagogical method and should be avoided. Alternatively, the faculty can consider integrating foundational courses at the curriculum from undergraduate programmes only for students coming from relevant disciplines (e.g., physics, business administration), in order to harmonize knowledge backgrounds of incoming students, while directing students with an adequate Informatics background on HCI courses, offered only to PSP students.

The PSP programme has implemented a formal procedure for student complaints. It requires students to report/address issues with the academic advisor (who is not in place) and if the problem is not successfully resolved through the above procedure, students can submit it to the Programme Secretariat. This can cause delays in resolving urgent cases, which may also require impartiality in their handling, such as complaints about intellectual property, equal treatment, or harassment. Moreover, a careful inspection of the complaint form (document A10) revealed that it does not include explicit provisions for obtaining informed consent regarding the use and sharing of personal data, leaving students unclear about how their personal information are handled and by whom.

Finally, students were unaware of the availability of the academic advisor.

III.   Conclusions

The PSP program demonstrates a strong commitment to student-centered learning, with commendable personalized support. Addressing the highlighted concern areas will further strengthen the program's ability to serve a diverse and growing student body while ensuring its sustainability.

Panel Judgement

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

Panel Recommendations

R3.1 Take the necessary actions to increase awareness of the academic advisor's role within the students.

R3.2 Take the necessary actions to increase flexibility for active professionals.

R3.3 Foundational courses (coming from the undergraduate programmes) should be offered only for students from different disciplines to ensure harmonization in the backgrounds/skills, while students with a relevant background could focus on dedicated HCI courses.

R3.4 The procedure of complaint management should be revised with a focus to encourage the reporting of incidents, facilitate effective response and include clear information about the use and sharing of personal data.

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 programme adopts all necessary regulations and procedures in order to be delivered in a student-centered learning environment. Among others, these include:

- A defined way of admitting students (A14 document),
- A defined way of monitoring students' progress (A11 document),
- A defined way of implementing and writing the thesis (Appendix B in A5, Appendix 2 in A14), and
- Defined regulations for the recognition and certification of studies.

Most of these regulations and procedures are efficiently applied.

Only minor concerns are raised about the actual implementation of the academic advisor's function.

II.   Analysis

It was found during the interviews with students and alumni that the function of academic advisor is not properly applied. This can be attributed to the fact that students are quite few and due to this, they usually develop very close relationships with their professors, especially with the supervisor of their thesis. Because of this, the supervisor usually plays an advisory role for students on various matters. However, the role of the academic advisor is wider and should be applied from the first moment an incoming student enrolls to the programme, as defined in the respective regulations (A11 document). Moreover, the piloting system which

has been established to support the incoming students and facilitate their queries doesn't work https://athena.upatras.gr.

Regarding the students' mobility through the Erasmus+ programme, the PSP has no records so far according to recent metrics (A17 document).

Last, although there exist detailed guidelines and instructions for writing the thesis, it is not available in the website of the PSP a thesis template (in English).

III.   Conclusions

This PSP programme has all necessary ingredients (procedures and tools) to fulfill its purpose for student-centered learning.

The faculty should remain committed to the effective implementation of student-centered regulations that have been set, including the function of the academic advisor. Looking forward to a potential increase of incoming students, this function should be re-evaluated by the faculty of the PSP programme, supported and followed in practice, it will ensure better monitoring and support of incoming students, increasing the level of their satisfaction.

Panel Judgement

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

Panel Recommendations

R4.1   Efforts should be made to support and follow in practice the function of the academic advisor.

R4.2   It is recommended the creation of a thesis template in English and its publication in the website of the PSP.

R4.3   It is recommended to establish methods for better communicating the mobility tools.

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 staff-student ratio is quite satisfactory and aligned with the target of student-centered learning. The staff categories are those prescribed by Law, as well as are also the employment contracts of the academic staff. We have to admit that the provided evidence allows no reason to question the fairness or the objectivity of the hiring phase. Research performance of the academic staff appears to be on the right mode. However, we feel that the rate in granting successful educational/sabbatical leaves, which is a well-accepted metric of research effort and performance, could be improved.

II.   Analysis

The presented records of research activities of the academic staff suggest that the academic staff is engaged in research at the same extent as it is engaged in teaching. In other words, the academic staff appears to have achieved a striking balance between research and teaching that should be especially noted.

As an aside, though, the EEAP feels that there is some room for improvement with regard to the offered guidance, support and directives for professional development to younger faculty

members. A comparable room for improvement could be perceived with regard to the participation in European research consortia and the securing of research funds from European agencies.

III. Conclusions

We strongly encourage the academic staff to keep pursuing roads of excellence in both teaching and research and competing against themselves to achieve improvements along the two axes identified above.

Panel Judgement

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

Panel Recommendations

R5.1 Strengthen the offered guidance, support and directives for professional development to newly hired faculty members.

R5.2 Strengthen participation in European research consortia.

PRINCIPLE 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

The academic unit provides students with all necessary facilities and support services for the smooth delivery of the PSP programme.

Minor issues have been found regarding the dissemination of these support services which can be easily mitigated by the faculty and the administrative staff. Further clarifications are provided below.

II.   Analysis

The academic unit is responsible for making available to students all necessary facilities, including classrooms and laboratories, access to technical equipment, and access to the library and databases. Although the equipment and infrastructure of PSP laboratories (as described in the presentation provided, titled "Interactive Technologies Lab") is quite relevant to the

needs of the HCI topics,it seems to be insufficient to support the research and academic needs (which also are expected to be increased with a potential increase of incoming students).

Moreover, the PSP offers a wide range of support services, such as mobility, remote-access, student care, services for the support of students from vulnerable groups (psychological, counselling, etc.), career counselling, student advocate, and mechanism for managing student complaints and objections. Most of these support services constitute well-established services, already offered by the host university for many years, so most of them are functional and electronically accessed by the students. Exceptions consist of the complaint management mechanism (A10 document), where a website for receiving students' complaints are not in place and complaints are only written on paper and submitted to the Programme Secretariat.

All available support services are presented to students in the welcoming ceremony, which takes place in the first week of their studies, and also communicated to them through the webpage of the host university. Related to the above, a student's handbook would be nice to be distributed to all students during the induction week detailing all processes and support services.

The faculty and administrative staff allocated for the implementation of the PSP programme seem sufficient and competent. Insufficient is evaluated by the administrative staff for i) the advertising and promotion of the PSP programme and ii) establishment and maintaining an alumni network (as described in A2 document).

Lastly, there is no tuition utilisation plan since the PSP programme is offered for free. It remains to be evaluated in the following accreditation of the PSP, a different tuition policy that might be adopted.

III.   Conclusions

Due to the nature of this PSP programme (delivered to a small group of students and for free), facilities and support services are effectively provided. A minor concern arises regarding the sufficient of the technical equipment and infrastructure.

Panel Judgement

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

Panel Recommendations

R6.1 Create a student's handbook to be distributed during the induction week, including all available support services.

R6.2 The mechanism of students' complaints should be offered electronically (via an online complaint form).

R6.3 Additional laboratory and RTD equipment, like simulators, VR tools etc., should be carried on board to better accommodate the research and academic needs.

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

UoP/PSP in H-CI established and operates an information system for the management and monitoring of data concerning students, academic staff, module structure and organization, teaching and provision of services to students as well as to the academic community.

The reliability of data that is essential for accurate information and decision making, as well as for identifying areas of smooth operation and areas for improvement as it is evident by the information provided.

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

graduates that require improvement and are currently work in progress centrally rather than at departmental level.

II.   Analysis

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

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

The information obtained from the satisfaction surveys is systematically analyzed, as evidenced by the information provided and appropriately communicated to be used towards further improvement.

III.   Conclusions

More detailed data relevant to the analysis and evaluation of data related to the availability and accessibility of resources (equipment, social services, IT facilities etc.) were not provided. The data provided were properly presented in graphs, demonstrating trends and allowing direct interpretation and comparisons.

Panel Judgement

Principle 7: Information management	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

R7.1   Formalize further the internal evaluation process.

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 program's website is well-structured, providing public information about the University and the Program online. It offers relevant details about its academic and educational activities in a clear and accessible manner. It is commendable that the website is rather complete when it comes to its content. However, since the website serves as the "shop window" of the Program, it is crucial to improve the site's aesthetics, keep its content up-to-date and utilize more UpToDate technologies to make the content less "dry". Information on graduates' employment rates is not publicly available, nor is information about their employment opportunities. The EEAP met with alumni who shared insights into the various career paths they have taken. The alumni expressed great enthusiasm about their experience with the Program.

II.   Analysis

The EEAP reviewed the publicly available information on the website and sample coursework materials provided online by MODIP. The EEAP expressed satisfaction and gratitude for MODIP's detailed presentation. The panel confirmed that the information on the Program's website is current and accessible. However, the EEAP identified some areas for improvement:

- The website lacks documents on the Program's Quality Policy and Quality Targets.
- There is no data on research projects and/or outputs, which could significantly help attract students.
- Internal Evaluation Reports are missing from the website.

III.   Conclusions

The Panel concludes that the Programme has satisfactory standards regarding the public information but we strongly suggest seriously consider the recommendations below.

Panel Judgement

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

Panel Recommendations

R8.1 As a PSP specializing in UI/UX, the aesthetics of the website must be greatly improved utilizing uptodate technology.

R8.2 Add internal and external evaluation reports on the web site

R8.3 Include links related to the alumni (their careers, etc.)

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

UoP/PSP in H-CI follows the established UoP accreditation and quality policy procedure. The activity categories subject to the principle of self-assessment that UoP/PSP in H-CI utilizes include instructional activity, research and innovation activity, economic activity and financial management, human resources and facilities and infrastructure.

The Quality Targeting (Α3 Στοχοθεσία Ποιότητας) Table submitted by UoP/PSP in H-CI, in the format required by HAHE includes 3 main strategic goals with "Quality Targets". It includes a combination of selected KPIs defined by UoP/PSP in H-CI for the optimal monitoring of their strategic goal categories and subcategories.

II.   Analysis

EEAP noticed the significant effort towards the optimal management of the data gathering, processing, and analyzing. Nevertheless, the results of the self-assessment process could be documented more effectively and efficiently.

III.   Conclusions

Last but not least, the feedback that OMEA received from the self-assessment process could be better communicated so that appropriate mitigating actions to be taken.

Panel Judgement

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

Panel Recommendations

R9.1   Improve documentation and formalize communication of the self-assessment process and findings.

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

This is the first external evaluation of the PSP. However there have been at least three external evaluations of the hosting departments and institution.

There has been an internal evaluation of the PSP by MODIP, which concluded that the observed numbers of candidates applying to enter the PSP were indeed (very) small. MODIP suggested three measures against such small numbers: *(i)* Investigate the feasibility of offering the PSP in Distance-Learning mode, under the perceived hope that such an arrangement would facilitate better a number of student needs, *(ii)* Strengthen the international character of the PSP, under the perceived hope that that this could attract an increased interest from prospective students, and *(iii)* Strengthen connections between the PSP and the industry, under the perceived hope to attract into the PSP candidates from the wide industrial pool.

Also, the EEAP has been provided with a Progress Report on how recommendations from an external evaluation report in 2015 and from an external accreditation report in 2018 have been utilized.

As for the external evaluation in 2015: There were 6 recommendations, on the implementation of which the PSP provided a report on what has been done so far. The EEAP considers that the reports for the last three of them are not adequately satisfactory.

As for the external accreditation report in 2018: There were 5 recommendations, on the implementation of which the PSP provided a faithful report on what has been done so far. The EEAP considers that the reports for the last two of them are not adequately satisfactory.

II.   Analysis

The EEAP would like to point out that the quality of the A18 document was rather poor and does not make justice to the PSP.

We have seen no written report on the steps taken to respond to the recommendations solicited in the previous internal evaluation by MODIP.

As for the external evaluation in 2015:
Recommendation 4: There has been reported, although recommended, no initiated negotiations with the Regional Governor's office to identify funding opportunities on a systematic basis.
Recommendation 5: There have been reported no implementations of financial and other incentives to support PSPs taught in English.
Recommendation 6: The progress rate is too low. Four years after the establishment of a Student and Learning Office, it is embarrassing to hear that the Departments are still in the process of appointing scientific managers to monitor and coordinate processes and actions.

As for the external accreditation in 2018:
Recommendation 4: There is no provided evidence for an initiative of procedures engaging internal and external stakeholders. (The reported Scientific Advisory Committee serves only the provision of scientific advice with regard to the evaluation of PSPs and doctoral degrees.)
Recommendation 5: We see no real problem against the "unification" of academic CVs and we wonder how it could be possible for the progress rate to have achieved such a low rate of progress (25%).

III.   Conclusions

Not much has been done for complying with the recommendations provided by earlier evaluations, as evidenced above. These recommendations should be easily taken care of.

Panel Judgement

Principle 10: Regular external evaluation of postgraduate study programmes	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

R10.1 Adhere carefully to earlier recommendations and give it an upgraded role in your agenda on upgrading the quality of the PSP.

PART C: CONCLUSIONS

I.   Features of Good Practice

- The HCI PSP is well focused and covers some very important modern IT fields.
- It is very well structured and offers substantial additional knowledge to IT professionals.
- The academic faculty and support staff are dedicated and of high quality.
- The student body seems enthusiastic and committed.
- The faculty / student ratio is very high (>1), ensuring good direct communications with the student body and contributing to an effective learning process.
- Research performance of the academic staff appears to be on the right mode.
- Students are encouraged to be actively involved in the learning process.
- The HCI PSP adopts all necessary procedures and mechanisms in order to be delivered in a student-learning environment.
- It provides all necessary facilities and support services to operate smoothly.

II.   Areas of Weakness

- In terms of enrolled students, the HCI PSP is very limited, this being the major risk to its sustainability.
- Some important modern HCI fields, like VR or simulator-based HCI are missing, the PSP being focused on 'standard' web-based approaches, tools and methodologies.
- The laboratories and equipementavailable are rather limited, especially in view of a significant expansion of the incoming student base.
- Due to the small PSP size, many of its QA and feedback procedures, although effective, are informal.
- Due to the very nature of the HCI PSP, its web pages should be exemplary; however this is not the case.
- Maintained and carefully updated records of recommendations provided in earlier evaluations were absent. There has been found no effort in defining and monitoring progress indices with regard to improving against such evaluations.
- Little attention appears to have been paid in upgrading and re-normalizing educational/sabbatical leaves.
- The PSP is not provided in a flexible timeline with respect to the active professionals.
- There are co-teaching courses for undergraduate and PSP students.
- The function of the academic advisor seems to be neglected and not properly applied in practice.
- The complaint management mechanism presents some issues related to the management of personal data.

III. Recommendations for Follow-up Actions

R.1 Extend HCI's offering to graduates incoming from non-IT institutions, eventually conditioning such offering to the obligation to follow selected courses of the ECED or CEID departments, perhaps during an additional introductory semester.

R.2 In line with other PSPs of the Institution, consider the introduction of some reasonable fees that would serve to further develop the laboratory and research equipment, further enhancing the HCI's overall offering.

R.3 Formalize relations with students, alumni and stakeholders, including the role of academic advisor; establish a stakeholders' advisory board, with representatives from Industry and Government.

R.4 Adapt HCI's offering, perhaps by offering on-line off working hours courses, to accommodate working students.

R.5 Modernise the HCI web platform up to the latest industry standards; integrate all remote access, communication, evaluation and feedback tools.

R.6 Seriously consider a plan for upgrading educational/sabbatical leaves.

R.7 Strengthen participation in European research consortia.

R.8 As a PSP specializing in UI/UX, the aesthetics of the website must be greatly improved
utilizing uptodate technology.

R.9 Add internal and external evaluation reports on the web site

R.10 Include links related to the alumni (their careers, etc.)

IV.   Summary & Overall Assessment

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

The Principles where substantial compliance has been achieved are: **2, 3, 8 and 10**.

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	

The members of the External Evaluation & Accreditation Panel

Name and Surname   **Signature**

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2. **Prof. Marios Mavronicolas**

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