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Accreditation Report
for the Postgraduate Study Programme of:
Computer Science & Engineering
Department: Computer Science
Institution: University of Crete
Date: February 2025

NOTES

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Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of Computer Science and Engineering of the University of Crete for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the postgraduate study programme of Computer Science and Engineering of the Department of Computer Science, University of Crete comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. Dr Vasilis Friderikos (Chair)

King's College London, United Kingdom

2. Prof John Botsis

EPFL, Lausanne, Switzerland

3. Dr Maria Papadaki

University of Derby, United Kingdom

4. Prof George A. Papadopoulos

University of Cyprus, Cyprus

5. Ms Maria Papatsimouli

University Western Macedonia, Greece

II. Review Procedure and Documentation

Please refer briefly to the Panel preparation for the postgraduate study programme review, as well as to the documentation provided and considered by the Panel. State the dates of the review and describe the review and the meetings held. Feel free to mention any additional information regarding the procedure, as appropriate.

The external evaluation accreditation panel (EEAP) of experts has been formed by the Hellenic Authority for Higher Education (HAHE). This panel was tasked with assessing the compliance of the postgraduate study program (PSP) entitled “Computer Science and Engineering” which is offered by the Department of Computer Science, University of Crete. In particular, the Panel was tasked with preparing an accreditation report in accordance with the HAHE Quality Assurance requirements (laws 4009/2011 and 4653/2020). To this end, the assessment of the PSP was carried out through a comprehensive review of relevant documents and online interviews with the Head of the Department, the Program Director, academic staff, current students, graduates of the programme and relevant stakeholders. The evaluation followed an evidence-based approach, focusing on a representative sampling of the PSP’s activities. Its objective was to assess the extent to which the programme meets HAHE’s quality assurance standards and to provide insights into its compliance, effectiveness, and practical implementation. The information provided by the PSP was considered factually accurate for the purposes of this assessment. The discussions with the members of staff, students and stakeholders were conducted remotely via the Zoom platform. The Department orchestrated an excellent online meeting where the various meetings took place in different virtual rooms. Furthermore, the Panel had access to a separate Zoom channel organized/created by HAHE where the EEAP members had the opportunity to have private discussions.

The EEAP attended a series of videoconference meetings, utilizing Zoom tools, in terms of evaluating and accrediting the postgraduate study programme in Computer Science & Engineering at the Department of Computer Science at the University of Crete.

The EEAP Review was scheduled to take place remotely (via Zoom) in two consecutive days of presentations, discussions and interviews. To be more precise, the meetings took place on Monday the 17th of February and Tuesday the 18th of February 2025. The remainder of that week was scheduled and planned for the EEAP members to perform further private meetings, consolidate their findings and write/draft the Accreditation Report, which follows hereafter.

During the first day of the meeting, the EEAP members had the opportunity to meet in a private discussion and exchange initial ideas and opinions about the submitted documents regarding the Accreditation as well as allocate the work that is needed to draft the report.

Then, at the opening session of the first day, the EEAP was warmly welcomed by the Director of the PSP, the Head of the Department, the Programme Director, MODIP and by OMEA

members. It was an opportunity for Prof Constantinos Magoutis and Prof Grigorios Tsagkatakis to present the department as a whole and the PSP program under consideration respectively. More specifically, they presented an overview of their programmes, providing information on PSPs' profiles, current status, strengths, challenges and future expectations. The discussion extended to the Standards for Quality Assurance and Accreditation (QAA) and associated quality assurance procedures in place for the PSPs. Ample time was also allocated for dialogue between the EEAP members and the Department's representatives concerning the overall modus operandi of the programme.

At the conclusion of this extensive meeting, all EEAP members sincerely thanked the Departmental representatives for delivering a comprehensive, timely, and precise overview of the PSP activities, highlighting its significance within the Department's initiatives.

During the first meeting on the second day (18.02.25) the Panel had the opportunity to discuss with the 6 members of staff that teach at least one course for the PSP programme. Since there were no specific presentations scheduled, ample time was available for a thorough and detailed discussion on the PSP programme and its various challenges. Topics of discussion encompassed, among other things, workload, learning outcomes across different courses, student evaluations, and the connections between PSP teaching and research activities.

In the second session, the Panel had the chance to engage with students from the Programme. The students were asked a range of questions by the Panel, covering all aspects of their current experience. These questions touched on their academic life, their experiences, any challenges they faced during their studies, their understanding of the PSP's structure and content, and their awareness of the quality assurance processes and policies, including their expectations and goals upon completing the PSP programme. All students actively participated in the discussions, enabling the Panel to gain a comprehensive understanding of the student experience.

During the subsequent session, the Panel had the opportunity to meet with several graduate students who shared their experiences of postgraduate studies. The majority of graduates who participated in the meeting are PhD students but there was also participation from a student which is currently working in industr. It has become evident that their participation in the PSP programme enabled them to advance their academic careers to the PhD level and/or land into high profile positions in industry. Following the discussion with the alumni, the Panel engaged in highly productive conversations with a wide range of social partners (mostly industrials from Greece and beyond), and stakeholders associated with the PSP programme. In this session, the EEAP explored their interactions and relationships with the PSP, their perspectives on the programme's structure and outcomes, as well as their views on the quality of PSP students.

Later, during a break from the discussions, the EEAP members held a private meeting to review the key outcomes of the virtual visit and prepare the oral feedback report for the Department.

The final session of the day was dedicated to the EEAP chair presenting EEAP's initial feedback and brief list of conclusions, primarily highlighting key positive aspects of the postgraduate programme but also some potential areas for improvement. More specifically, the Panel shared some key findings from the two-day remote visit, along with a summary of the accreditation review meetings' outcomes, with the department's leadership, the Programme representatives, and the MODIP representatives. There was also sufficient time for a fruitful discussion that concluded the meeting.

During the two days of discussions, the EEAP members had two private sessions that took place in between the different scheduled meetings with the Department. In addition, a follow up meeting has been scheduled by the Chair to consolidate all findings, create a common consensus and conclude the Accreditation report.

It must be noted that the report hereafter presents the collective findings of the Panel, based on the meetings, PSP's quality assurance material provided by HAHE and shared documentation provided by the PSP which was available on the portal. Finally, it should be noted that further information has been requested by the Panel and this information has been delivered to the Panel members by the MODIP.

III. Postgraduate Study Programme Profile

Please provide a brief overview of the postgraduate study programme with reference to the following: history, academic remit, duration of studies, qualification awarded, employment opportunities, orientation challenges or any other key background information. Also, you may provide a short description of the home Department and Institution, with reference to student population, campus or any other facts, as deemed appropriate.

The postgraduate study program (PSP) entitled "Computer Science & Engineering" from the Computer Science Department of the University of Crete is offered as a 4-semester programme with 120 ECTS credits accepting students two times per year and each cohort is approximately between 25 to 30 students.

The academic field of this PSP falls into what we call Computer Science and engineering, covering a wide range of modern computer science topics and closely related engineering applications. More specifically, the curriculum grounded in rigorous scientific foundations and methodology, aims to develop hardware and software systems designed to meet specific needs by modelling and solving relevant problems. As a result, it equally covers the areas of computing infrastructure, software theory and data, as well as applications in computer science and engineering. Students who enrol into the PSP programme are tightly integrated into the educational and research activities of the Department. Regular physical attendance and participation in the activities specified by this regulation are mandatory.

For the successful completion of the PSP, students are required to attend eight (8) courses and complete an individual (research oriented) Thesis (there is also availability for selective courses). Each course corresponds to 6 ECTS credits, whereas the Thesis corresponds to 30 ECTS credits.

The programme offers various different methods of assessment, which depend on the specific subject of a course, beyond the nominal in-person examinations.

The PSP programme is delivered in English, with all courses being taught in English, and the Thesis is also required to be written in English. However, in cases where a course has a small number of students, all of whom are Greek-speaking, interactions may take place in Greek upon mutual agreement.

There are no tuition fees for the Programme and a significant percentage of students could be funded to assist them towards living expenses.

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The PSP programme on Computer Science and Engineering from the University of Crete is one of the oldest postgraduate computer science programmes in the country in this scope area. Currently, the programme offers more than 30 different courses to postgraduate students in addition to the overall strong research-orientation of the programme that immerses students into scientific writing and allows most of the students to be involved in a research publication during their studies. In other words, the PSP can be deemed as research-focused, i.e., has a significant research component (more than 30 ECTS in research) which can be seen as PhD preparation.

Despite the large number of offered courses and associated members of staff involved in teaching, there is a well-defined structure of the PSP programme and the overall organization is well defined and implemented. Based on the submitted documentation to HAHE it is evident that the learning objectives, outcomes, and qualifications follow the European and National Qualifications Framework for Higher Education (relating to the so-called level 7 which denotes postgraduate studies).

It is important to note that the Department operates a continuous improvement strategy, which focuses on course design, implementation, evaluation, and enhancement. Such activities take place annually (but only for courses needed to be discussed and/or updated).

Overall quality assurance policies are implemented via the following committees of the Department,

- **Postgraduate Studies Coordinating Committee** (5 members)
- **Departmental Outreach Committee** (4 members)
- **Departmental Studies Committee** (5 members)
- **Health and Safety Committee** (1 member)
- **OMEA Committee** (2 members)

The default language of instruction is English, and students are required to write their dissertation (research thesis) in English. This should be done following established procedures, including the use of LaTeX templates, which facilitate proper formatting and ensure consistency in the final output.

Based on consultations with the programme director, input from the staff members involved in the programme, and feedback received from the students, the programme maintains a strong commitment to delivering high-quality education and employing effective teaching methodologies for its students. All courses are delivered by staff members who possess extensive expertise in their respective fields.

The Department as a whole maintains an excellent industrial presence. For instance, career days attract participation from over 30 companies. Additionally, an external liaison committee has been established; however, it currently consists of only three members, with just one representative from the industry.

The PSP programme produces graduates who are well sought not only to join doctoral programs in Greece or abroad but also start-ups and companies at the forefront of innovation within the scope area of computer science and engineering.

There are no tuition fees for this 2-year postgraduate programme; that was a well-thought Departmental decision to enable students of high quality to join the programme without creating financial barriers. At the same time, there is a significant number of scholarships based on academic credentials which can ease students on their living expenses.

II. Analysis

While a low student-to-staff ratio can enhance **individualized learning**, here we have an extreme case where the student-to-staff ratio as presented by the program director is almost 1. The Panel believe that this is financially (in terms of utilization of the scarce resources of the limited members of staff) and academically unsustainable. A balanced ratio ensures, inter alia, **quality education, faculty engagement, financial stability, and long-term program viability**. Furthermore, a very low student-to-staff ratio can limit opportunities for peer-to-peer learning and collaboration among students, which are essential for fostering a dynamic and diverse learning environment. To this end, there is significant scope for course review and consolidation so that members of staff teach courses which has a sufficient number of students to enable interactions and efficient learning. For example, the Department could consider sunsetting (or consolidating) courses like these ones,

- 'Introduction to Game Theory': 3 students,
- 'Laboratory Design of Digital Circuits with Electronic Design Automation Tools': 2 students
- 'Packet Switching Architectures': 3 students
- 'Distributed Computing': 2 students

The Panel understands that some courses with low number of students are offered by visiting academics. Hence, in such special cases a low number of students could be allowed. Although the Department has significant industrial links and many stakeholders are somehow familiar with the details of the PSP programme, their involvement tends to be informal and somewhat ad hoc. There is an external advisory committee, but this is composed by only 3 members with only one being from industry. Hence, the synthesis of this board could be further enlarged to include various other stakeholders and industrialists; this could significantly boost the programme's effectiveness, open doors for industry-led projects, and establish networking opportunities for students. Enhancing these connections could also bolster graduates' employability by ensuring they possess the skills needed to meet changing industry requirements.

The 30 credits related to the courses in the 3rd semester cannot be easily audited. Hence, the conduct of an annual audit of the quality assurance system of the PSP related to those 30 credits that correspond to 25% of the whole PSP programme is hard to be documented.

In the programme structure and specifications students are also involved in teaching assistant (TA) roles for undergraduate courses to acquire teaching experience. This is integrated into

the programme, it is a mandatory obligation for the students, and they should acquire 3 ECTS credits per semester. However, teaching assistance roles are not well planned since based on the received evidence there is high variability in load per student. Furthermore, in terms of equity and fairness, TA roles shouldn't be mandatory. It is often the case that some students may not feel comfortable with teaching responsibilities, especially those who lack confidence in public speaking or communication skills. It must be emphasized that teaching should not be considered as a soft skill since teaching - undeniably - entails much more than this. To this end, a mandatory requirement could place undue stress on them.

III. Conclusions

With respect to this Principle, the EEAP is satisfied with the implementation of the quality and assurance framework in the PSP programme. It has been evident by our discussions that the Head of Department, the Program Director and members of staff are fully committed to the success of the programme. That being said, the Panel suggests addressing some areas to further enhance the quality and effectiveness of the PSP programme.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- **Set a Minimum Enrolment Requirement:** Implement a minimum student enrolment threshold for a course to be offered in a given term (e.g., at least four or five students).
- **Optimize the Course Offerings:** The department is encouraged to review and potentially reduce the number of available courses, particularly in areas that consistently fail to attract sufficient student interest. The Department should seek/explore innovative ways of doing so such as for example having two course leaders per offered course.

- **Enhance Industry Engagement:** Strengthen the involvement of the industrial advisory board, with a particular focus on increasing participation from industry professionals (consider the potential of having a member not based in Greece).
- **Teaching Assistant roles:** Ensure that teaching assistance load per student is well planned. Consider relaxing the requirement of being mandatory for the students. If not completely, at least for the first year of studies in the PSP programme to allow students being more mature.

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 PROGRAMME 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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The PSP in Computer Science and Engineering of the Department of Computer Science at the University of Crete was established in its present form in 2023, although post-graduate activities have been present since 1985. The provided material and discussion during the review revealed a PSP curriculum structure covering courses, course categories, ECTS credits, and expected learning outcomes aligned with the EQF level 7. Completion of the PSP programme requires 120 ECTS. The Student Guide and course outlines are well-structured. Also, there is a good link between research and teaching, as documented by publications as a result of students' participation in research activities during their studies and final Thesis project.

The provided documentation indicates that the relevant regulatory framework stating the procedures for the institution's approval of the programme is in place.

The institution's strategy is well-defined. The provided documentation shows sufficient evidence of a continuous self-review process for the programme's key elements, such as the PSP Student Guide, Course and Thesis outlines, expected learning outcomes, internships, and mobility opportunities.

The programme encourages students to follow industrial internships, without ECTS credits.

The institution hosts a yearly industrial forum on campus which attracts several companies and supports a network of its graduates and reunions.

II. Analysis

The EEAP noticed that QA practices are implemented periodically. Documents regarding the programme's long-term vision, efforts to further enhance visibility, policies to strengthen industrial links and outward-looking strategies seem to be in place. The international

experience in the relevant fields is well present via the active research of its faculty members and invited experts.

Actions toward continuous development of the PSP are in place. The discussions indicate that the programme's Faculty reviews and updates relevant components of the programme to address current and future needs.

The number of enrolled students is good and from relevant discussions with the faculty and students, coursework and Thesis project a good link between research and teaching exists.

The students are active in research and teaching but their participation in the course/programme evaluation is low in courses with relatively high enrolment according to the provided information. There was no clear evidence of students' involvement in periodic programme review.

There is an external stakeholders committee, and based on the discussions, it is consulted on topics regarding programme's adjustments or changes as dictated by progress in the pertinent domain and societal needs, but it is limited to 3 members with only one from industry.

The EEAP noticed that out of the 4 semesters to complete the 120 ECTS credits, the 3rd semester contains two units of 15 ECTS each. These two units lack description, learning outcomes and deliverables.

III. Conclusions

The PSP clearly defines its academic profile and programme orientation, emphasising its research-focused nature, scientific objectives, specific subject domains, and areas of expertise of a high level comparable with international standards.

The advisory board with stakeholders from the labour market, academics, and social partners to consult on curriculum review and adaptation is small for such a programme and institution.

The curriculum is extensive, rich and encompasses several topics in the domain of computer science and engineering. The two courses in the 3rd semester, are listed without content, deliverables and assessment methods. This is a limitation than needs to be addressed.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- Modify and adapt the curriculum for the 3rd semester with a clear description of work, deliverables and learning outcomes.
- Establish an official external advisory board with sufficient members from industry, academics, graduates of the programme and involve them in the programme's changes and quality assurance.
- Involve the students in the programme's review, revisions and quality assurance.

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The PSP offers a wide range of 35+ optional courses across 12 thematic areas, grouped under three pathways. Students are encouraged to opt for courses across one to two pathways of interest and are supported in the selection process with the guidance of a personal academic tutor. The role of a personal academic tutor is clearly outlined (M3.3). Courses are taught and assessed on campus in English, where English language support and professional skills courses, including scientific academic writing, are included in the curriculum. As students progress through their studies, they also benefit from the expertise of a thesis advisor, who guides them through their final Thesis project (M2.3). Student cohorts and academic staff are predominantly male, with approximately 80% male students and 85% male academic staff.

The assessment strategy includes the publication of learning outcomes and assessment elements in advance, which are clearly described in the online course catalogue for each course (https://www.csd.uoc.gr/CSD/index.jsp?content=pg_courses_catalog). Assessment elements often involve a wide range of skills and competencies, including practical exercises, oral presentations, individual coursework and exams. With the exception of HY-697 and HY-698 (as also noted in Principle 2), all courses have clearly specified learning outcomes and individual assessment elements. The individual assessment element weights are clearly stated in most course specifications, but not all.

The student feedback mechanism is conducted electronically at the end of each academic semester by independent unit, MODIP (<https://www.modip.uoc.gr/>). Students are encouraged to access evaluation forms on their mobile devices at pre-scheduled times on campus, without the presence of an academic, and by using a unique code. The evaluation results are then considered by the Department's Postgraduate Studies Committee, the Department's Internal Evaluation Team (IEG) and the Quality Assurance Unit. A sample course evaluation form is provided in the documentation pack (M3.1a), and the student feedback results are published on a prominent page of the postgraduate website, offering insights into satisfaction and completion rates per year, per semester and per course (<https://www.csd.uoc.gr/CSD/index.jsp?custom=courseEvaluation>). Student feedback results for semester 3 and 4 courses seem to be missing.

In case of complaints or appeals, our interviews with students and graduates revealed that they were aware of this right and they had exercised it in the past by using their student advocate as a first point of contact, who then guided them through the process. The appeals and complaints process is clearly described. (M3.2)

II. Analysis

The curriculum design offers a great deal of flexibility for students to explore a thematic area of their choice while supporting them to develop research and dissemination skills that will be useful for their future career progression in research, academia or industry. The role of the personal academic tutor is important in guiding students through their course choices. However, the reliance on a tutor could potentially introduce scalability issues if student numbers increase. In that case, it may be advisable to introduce more formalised pathways for popular career choices within the programme, while still allowing flexibility for slight deviations, if required.

The wide range of assessments also accommodates different learning styles and competencies, so the assessment strategy is working well, as further evidenced by the high attainment levels in the programme. It is evident that the learning outcomes specification for each course is robust, and it demonstrates strong compliance with Bloom's taxonomy and the Dublin Descriptors for level 7. The specification of learning outcomes in the two semester three courses, namely HY-697 and HY-698, is a limitation that would need to be addressed. As the assessment element weights were missing in some courses, it would be worth introducing this as a check in the annual course quality review processes. Another aspect worth considering is an assessment feedback policy, which would specify the number of working days after assessment submission when students should reasonably expect the return of grades and feedback on their work (e.g. 20 working days).

The curriculum is also supported by high-quality research-active academic staff of international reputation. Our interviews with students and graduates further confirmed the high quality and strong reputation of the programme and the valuable mentorship and support they received from the academic community. Students felt proud to be part of the student and alumni community and provided many examples where the links and networks they built during their studies enhanced their subsequent career progression. They all felt appreciative of the guidance, support and opportunities they received during their studies. At the same time, it is relevant to note the underrepresentation of female students and staff, which is an area for consideration and potential future growth.

In terms of the student feedback mechanisms, the university's ethos and commitment to collect and continuously reflect upon student feedback was evident from the submitted paperwork, the department website, as well as the panel's meetings with students and staff alike. The high satisfaction rates from the student questionnaires reflect high-quality teaching, assessment and feedback. The prominent visibility of past student evaluation results on the department website (incorporating satisfaction and completion rates per year, per semester and per course) provides not only an invaluable and informative resource for students but also serves as another indicator of the department's commitment to high-quality learning and feedback processes. Similarly, the independently run (MODIP) data collection mechanism is robust. It takes place electronically on campus at pre-scheduled times, without the presence of academics, and it is accessed by students with the use of a unique code.

The design of student feedback questionnaires (M3.1a) is comprehensive and it provides the opportunity for students to reflect and comment on their learning experience. Having said that, it might be useful to also incorporate questions on the availability (or adequacy) of library and IT learning resources in relation to the course, the extent to which they understood the assessment criteria prior to assessment, the timeliness and quality of assessment feedback, the extent to which they felt part of a learning community, or even the extent to which they feel students' opinions were valued and their feedback acted upon in this course. This would be particularly useful for students who might not be as forthcoming with feedback during scheduled sessions and meetings but might feel more comfortable sharing their views via an anonymous form.

III. Conclusions

In conclusion, there is strong evidence of full compliance with student-centred learning principles in this PSP.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

- Specify the content, learning outcomes and assessment deliverables of the two semester three courses, namely HY-697 and HY-698.
- Check that all advertised course specifications meet all quality criteria, including assessment element weights, during the annual QA review processes.
- Consider introducing an assessment feedback policy, which would specify the number of working days after assessment submission when students should reasonably expect the return of grades and feedback on their work.
- Consider a growth strategy that would increase the representation of female students and academic staff.

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The PSP sets the ground rules for scientific integrity, independence, and researcher responsibility. It covers ethical research practices involving people, animals, and the environment, while also ensuring personal data protection. On top of that, it defines the responsibilities of collaborators and academic supervisors, making sure research is conducted transparently and ethically.

The PSP is designed to provide advanced knowledge in computer science, balancing theory with hands-on applications. Students can choose from a range of courses in computer science and engineering, all built around rigorous scientific methodology and the development of analytical and problem-solving skills. Plus, completing a Master's Thesis is mandatory.

Students are expected to follow specific ethical guidelines throughout their studies. Academic integrity means no plagiarism or cheating in exams. When it comes to research, they need to adhere to ethical principles to ensure their findings are valid and trustworthy. Lastly, teamwork and respect are core values in the academic community, so students are expected to collaborate effectively and maintain a professional attitude toward their peers, professors, and researchers.

According to the department's study rules, the minimum duration is 2 years (4 semesters). The required supporting documents for applying to the PSP are listed on the department's website. The PSP accepts applications from degree and diploma holders or final-year students from computer science-related fields, but the criteria for evaluating applications aren't specified. Basically, course evaluation usually involves doing individual or group assignments and taking exams.

II. Analysis

The PSP requires students to participate in teaching assistance as part of their studies. On top of that, the program offers opportunities for international mobility, but most students choose not to take advantage of them. The total number of students admitted to the master's program is capped at 100 per year, and applications can be submitted twice a year.

III. Conclusions

The PSP in Computer Science and Engineering at the University of Crete is a top-tier academic program that equips students with specialized knowledge and skills. The admission process is competitive, and completing the program successfully requires a mix of coursework and research. Students take on significant academic and ethical responsibilities, while the program opens up great opportunities for career growth or continuing studies at the PhD level.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- Detailed description of the criteria for evaluating applications from potential students.
- Let students choose whether they want to do teaching assistance or not.

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The Department currently has a 22 strong faculty, comprising 15 Professors, 3 Associate Professors and 4 Assistant Professors. All members of the faculty are directly related to the offering of the programme's courses.

The Faculty is quite active in high-quality research, with an average of 7 publications per year and around 600 citations per faculty member. These publications are typically in highly ranked journals and conferences. There is also a good level of external funding (involving also ITE) of around 7 million euros.

The Faculty have been appointed and promoted through the ranks following the established Greek framework of an appointments committee that includes members from other universities and follows a rigorous evaluation of the research and teaching credentials of the Faculty under consideration. However, no evidence has been provided as to whether the institution has established any awards related to excellence in teaching or research.

While interviewing the Faculty, it became evident that they take advantage of sabbatical leaves and the system encourages them to do so.

The workload of the Faculty involved in the offering of the program in question is, on average, around 6 hours per week.

The Faculty are evaluated regularly by the students by means of online questionnaires that can be filled and submitted online. As is the case with other institutions, the percentage of students actually participating in this faculty assessment exercise is in the range of 30 to 80%.

II. Analysis

The strength of the Faculty is sufficient to offer the graduate programme that is being assessed for accreditation. The level of research quality is similar to that of other institutions nationally and internationally. The level of external funding is adequate. Compared to other institutions at a national level, the percentage of faculty members taking sabbatical leaves and, in general, taking advantage of mobility mechanisms is quite high. The workload is appropriate for

academic staff. There is a procedure for dealing with cases of Faculty members underperforming in their teaching duties.

III. Conclusions

Overall, the Faculty is well qualified to offer the PSP that is being assessed for accreditation

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- Establish awards for excellence in teaching and/or research.
- Increase the student participation in evaluations of courses with relatively high enrolment.

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 LEARNING AND STUDENT SUPPORT, AND – ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, 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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The Master's Program Study Regulations outline the admission process, where applicants are evaluated based on academic criteria, recommendation letters, and possibly an interview. To graduate, students need to complete 120 ECTS credits, which fall within the typical range for postgraduate programs in both the EU and Greece.

The PSP attracts working professionals, and many graduates go on to pursue a PhD. However, the Evaluation of Human and Material Resources points out that despite the 22 faculty members, the number is not sufficient to meet the program's growing demands.

The program is housed in a modern building in the Heraklion University Campus. Students have access to digital services, including online learning, VPN, academic email, and remote access to specialized computers, as well as support services such as housing, meal plans, counselling, and healthcare.

The program's administration is handled by two staff members, who manage student records, exams, certificates, scholarships, and Erasmus programs. They also keep students updated through the department's website and social media. Additionally, the student info materials provide guidance on course credit recognition, thesis writing, student IDs, and internship opportunities.

II. Analysis

The PSP is housed in a new building and is completely free for students. They stay updated through the official program website and email notifications. Plus, they have full access to all knowledge databases provided by the university.

The teaching staff includes 22 members, with external collaborators occasionally giving guest lectures to support the department. The administrative team consists of three staff members handling the program's operations.

III. Conclusions

The PSP stands out for its high academic standards, strong research activity, and close collaboration with the Foundation for Research and Technology – Hellas (FORTH), providing students with a well-rounded education and solid career prospects. However, it faces challenges due to the growing number of students and limited human and financial resources, making staff expansion and better funding essential to maintain the program's quality.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- Promote institutional communication with alumni
- Encourage students to participate in departmental meetings

PRINCIPLE 7: INFORMATION MANAGEMENT

INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF POSTGRADUATE STUDY PROGRAMMES AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY 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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed in three distinct parts.

I. Findings

The University of Crete has established a set of QA principles for the collection of data regarding students, teaching staff, course structure, annual monitoring, periodic assessments, etc.

The Department is using a number of platforms and tools (eduportal, UoC-elearn), classweb) for automating the process of student enrolment, publishing information on the offered courses through the departmental web pages, managing student grades and getting feedback

from students regarding the quality of teaching. Furthermore, the Department manages a dedicated website for the program.

The Department has established communication links with graduates that include the use of social media.

II. Analysis

Data collected from various sources provides a holistic view of PSP's performance and student experience.

Efficiency measurements using quantitative and qualitative indicators through KPIs are in place, providing valuable and reliable information to support higher-level decision-making.

Regular data collection from students at the end of each teaching semester allows for periodic evaluations and identification of trends for improvement. The panel has been told that the response by students is around 70-80% which is considered quite satisfactory.

There is a transparent procedure in place for handling student complaints. However, while interviewing the students, some of them were not fully aware of their rights. Nevertheless, they said that in case of any issues, they would go first to their student advocate.

Performing dedicated regular surveys involving other stakeholders (in addition to the students), for example, alumni and the existing industrial network may enhance the incorporation of useful feedback for the continuing review and development of the PSP.

The EEAP acknowledges that the PSP is making an effort to collect feedback from various external stakeholders (including staff's extended network of regional and national social partners and industry experts). Establishing formalised and documented processes for eliciting input from external stakeholders may enhance academic offerings through systematic external collaboration.

III. Conclusions

The PSP ensures comprehensive data management and quality assurance processes contributing to its effectiveness and success.

The PSP should consider extending and formalising external stakeholders' active participation in its QA processes, including, among others, alumni. Furthermore, the department should make every effort to inform students about their rights.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- Further promote the active participation of external stakeholders, capitalizing on staff's wide network of external relations in PSP QA processes.
- Make every effort for students to be aware of their rights and what relevant procedures are in place.

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The website of the Computer Science and Engineering Department includes a separate space for postgraduate studies, with comprehensive content on the PSP programme, offered in Greek and English. The website's transition between Greek and English content is seamless and can be easily controlled by a flag at the top right corner of each page. The postgraduate programme space contains a plethora of useful information, including the following:

- General description, programme objectives, learning outcomes, applied teaching methods, awards.
- Quality processes, student evaluation data, pass rates per course, regulations for postgraduate taught programmes and contact information for secretariat services.
- Guidance on how to apply to the programme, link to alumni and school professional communities.
- Full curriculum specification and details (course catalogue).
- Faculty details, Erasmus+ mobility, Services, Scholarship details, News and Announcements.
- Research topic areas, experts and associated faculty.
- Guidelines for new 2024/25 students.

The information is usefully laid out and contains comprehensive and up-to-date information. A formal website management process is in place, but it is not clear whether this includes regular security testing and reporting processes (M8.1). Academic staff pages (personal websites) do not adhere to a standard format, nor do they provide a warning when directing the reader to a different external domain, such as Google sites. It appears that staff publications, projects and content are managed on an individual basis, yet the majority of them appear to be up to date. Visitors to the site are not presented with a GDPR data protection notice, which suggests that no personal data are collected by visiting the site.

II. Analysis

The publicly available information on the programme is impressive indeed. In alignment with the department's commitment to excellence in communication and dissemination, it is notable that comprehensive information is available in both English and Greek, with a smooth transition between the two languages. Links to social media networks associated with the department and alumni are provided, alongside other useful information as listed in findings. The search facility works well, and the e-learn websites and webmail are accessible through a login portal.

On a minor note, it is interesting to note that the presence of ITE (FORTH) is not as prominent as one would expect. Also, staff pages seem to be managed individually, with no warning if

they redirect to external websites. It might be useful to consider a common staff page template and a content management system that would automatically track and update staff publications, projects, or even taught courses. Finally, the visitor is not presented with a data protection notice, which suggests that no personal data are collected by visiting the site. In that case, this could be made explicitly clear to visitors.

III. Conclusions

In conclusion, there is strong evidence of full compliance with the provision of public information in this PSP.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

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

- Consider highlighting the role and benefits of ITE (FORTH) to the programme and its students.
- Consider adopting a standard staff profile template
- Provide a GDPR data protection notice

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

Internal self-assessment of the programme is based on procedures aiming at continuous improvement of the level of educational offerings along with supporting a learning environment that ensures the current character of the programme and the strategic goals of the Institution.

Based on the discussions and the provided documentation, factors considered in the procedures for the on-going monitoring include the curriculum, students' workload, assessment, their expectations as well as societal needs and labour market.

Also, scientific and technological developments, societal and job market needs, as well as national, European, and international policies are taken into consideration. The PSP Director, with the steering committee, is responsible for collecting requests and following established procedures for necessary changes to the programme.

The procedures to carry out the internal self-review seem to be in place. The annual report of self-assessment is submitted to MODIP for review, and recommendations are shared with the general faculty assembly.

Decisions for programme changes and/or modifications for improvement are made at the end of the academic year and implemented at the start of the following academic year.

II. Analysis

Through the process of internal review and continuous improvement plan, the positive aspects of the programme are reinforced by adding new topics and courses based on scientific and technical developments in the field. The collected information is analysed, and the programme is adapted to ensure that it is up-to-date.

There is a strategically designed consideration for improving courses using the course evaluations by students. The average student evaluation is good but the participation in courses with high enrolment is low. Programme weaknesses are addressed when problems are identified in students' evaluations. The PSP is reviewed and revised but the role and contribution of students and other stakeholders is not clear.

III. Conclusions

The self-assessment procedure of the PSP programme is well established, but the participation of the students and the external stakeholders is not apparent.

Panel Judgement

Please tick one of the following:

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

Panel Recommendations

- Involve clear and systematic participation of the students, alumni and external stakeholders in the self-assessment of the programme.
- Improve students' participation in the courses' evaluation.

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

Please comment on the compliance with the Principle. Specifically: Please describe the findings related to the Principle, analyse, and conclude your judgement. Findings, analysis of judgement and conclusions should be developed below in three distinct parts.

I. Findings

The PSP has not previously received an external evaluation of the offered postgraduate programme in Computer Science and Engineering. However, an internal evaluation did take place in 2024. The principal output from the internal evaluation was the recognition of the high quality of the provided education to the students. It has been further mentioned the potential for increasing the participation of women and graduates from institutions outside the University of Crete. Furthermore, the collaboration with the co-located research institute at the University of Crete has been very beneficial in funding students and enhancing the overall research orientation of the programme.

II. Analysis

The Department did consider the internal evaluation. For example, the issue of gender inequality in the PSP programme is currently monitored and considered. To this end, efforts are in place to increase female participation in the programme. Having said that, the current level of female participation is in line with the average EU levels in similar Departments. In other words, this is a discipline specific issue not Departmental.

III. Conclusions

There has been no external evaluation of the PSP program so far, however the Department fully embraced and considered an internal evaluation that took place in 2024

Panel Judgement

Please tick one of the following:

Principle 10: Regular external evaluation of postgraduate study programmes	
Fully compliant	X

Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

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

- Continuation of the effort to increase female participation in the PSP, as eluded in the internal evaluation, whilst in parallel increase the effort to promote the PSP program to external students (i.e., graduates from other Universities)

PART C: CONCLUSIONS

I. Features of Good Practice

Please state aspects of good practice identified, with regard to the postgraduate study programme.

- The Department of Computer Science at the University of Crete offers a unique PSP programme in the sense that it allows students to immerse themselves into a large variety of different high-quality courses within the scope area of computer science and engineering.
- A well-recognized PSP program that is highly valued not only by its current and former students but also by key stakeholders; it addresses not only regional demand for skilled computer scientists but also meets real-world needs by producing highly skilled professionals.
- High-quality members of staff at the Department of Computer Science; experts of international calibre quality.
- The PSP program equips students with valuable professional opportunities, strengthening their employability and facilitating their seamless transition into the job market.
- The PSP programme incorporates a highly experienced professional administrative team that efficiently supports both faculty and students.

II. Areas of Weakness

Please state weak areas identified, with regard to the postgraduate study programme.

- Mandating a compulsory teaching assistant role for all postgraduate students in the program may not foster an inclusive academic environment.
- The Industrial Advisory Board could be augmented in terms of participation (currently 3 members). The PSP programme will greatly benefit from the formation of a larger IAB group;
- The specification of learning outcomes, assessment methods and deliverable in the two semester three courses, namely HY-697 and HY-698

III. Recommendations for Follow-up Actions

Please make any specific recommendations for development.

- Teaching assistant roles is recommended to be offered as optional. A more flexible approach that considers individual circumstances and offers alternative pathways for skill development would better support inclusivity and accommodate the diverse needs of the student body.
- Restructure the 30 ECTS allocated to the two courses on literature review and research direction/dissertation proposal (HY-697 and HY-698). These courses should have clearly defined outputs and deliverables and should be designed in a way that allows independent assessment and external auditing as standalone courses.
- Consider the establishment of awards for excellence in teaching and/or research.
- Improve students' participation in the courses' evaluation and create relevant KPIs.
- An assessment feedback policy is required so that feedback to the students is provided in a timely manner.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 3, 4, 5, 6, 7, 8, 9, 10

The Principles where substantial compliance has been achieved are: 1

The Principles where partial compliance has been achieved are: 2

The Principles where failure of compliance was identified are: None

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

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

1. Vasilis Friderikos

Vasilis Friderikos

2. John Botsis

J Botsis

3. Maria Papadaki

M Papadaki

4. George A. Papadopoulos

George A. Papadopoulos

5. Maria Papatsimouli

M Papatsimouli