ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

ΑΔΙΠ

ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ
ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC

HQA

HELLENIC QUALITY ASSURANCE
AND ACCREDITATION AGENCY

Accreditation Report
for the Undergraduate Study Programme of:
Informatics & Telecommunications

Institution: National & Kapodistrian University of Athens
Date: September 2019

Report of the Panel appointed by the HQA to undertake the review of the Undergraduate Study Programme of **Informatics & Telecommunications** of the **National & Kapodistrian University of Athens** for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I.   The Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme of Informatics & Telecommunications of the National & Kapodistrian University of Athens comprised the following three (3) members, drawn from the HQA Register, in accordance with the Law 4009/2011:

1. **Prof. Panayiotis Zaphiris** (Chair)
   Cyprus University of Technology, Cyprus

2. **Prof. Constandinos Mavromoustakis**
   University of Nicosia, Cyprus

3. **Prof. Magdalini Eirinaki**
   San Jose State University, USA

II.   Review Procedure and Documentation

The Accreditation Panel (henceforth: AP) conducted an accreditation evaluation of the undergraduate program in Informatics and Telecommunications of the National and Kapodistrian University (henceforth: program). The AP panel visited the University on the 17th and 18th of September 2019 and used the 19th-21st of September for drafting this report. To prepare for the visit, the panel members had individually read and studied the documents which the department had earlier submitted to ADIP/HQA. The documentation and the supporting material provided to the panel included:

1. The evaluation guide created by HQA
2. The mapping grid, created by HQA
3. A tabulation (prepared by HQA) of the scores of the department against the quality indexes
4. A tabulation (prepared by HQA) of the scores of the specific program against the quality indexes
5. The accreditation proposal prepared by the department
6. A set of annexes to the accreditation proposal, including the study guide, course descriptions, student evaluation scores etc
7. Statistics regarding the department and the specific program of studies
8. The Quality Assurance policy of the specific program of studies
9. A set of documents presenting quality indicators both for the department and the study program,
10. The report of the 2011 external evaluation conducted by HQA for the Department of Informatics and Telecommunications
11. The results of the internal evaluation of the program of studies
12. Tabulation of student feedback questionnaires

The materials and documents which had been submitted in advance of the visit were informative and detailed. The Committee also had access to links from the University and departmental website. In addition, during the on-site visit, the department Head provided additional materials (electronic versions of power-point presentations prepared and presented by the department, summaries of selected undergraduate student thesis).

On Tuesday 17 September, the panel attended a briefing from the ADIP president and director, in which the procedures and rationale for the accreditation were outlined and explained. The Committee was then met by Konstantinos Bourletidis, Secretary of MODIP and Sofia Krousaniotaki, administrative support of MODIP and walked together to the main building of the University where they met Associate Professor Dimitris Karadimas, Vice Rector of

Administrative Affairs & Student Care and President of MODIP. The meeting then continued at the Kostis Palamas building in the presence of the Head of the department (Prof. Antonios Paschalis), the vice-Head of the department (Associate Prof. Ioannis Cotronis) and the members of OMEA. The department Head introduced the members of OMEA to the panel, and the panel explained the rationale for the on-campus visit. The Head and vice-Head of the department made a presentation, focusing on (1) the history and structure of the department, (2) teaching, (3) research, and (4) outreach activities and other matters related to the program of studies. Ample time was allowed for questions and discussion and special focus was placed on discussing the revised program of studies that the department has implemented in the last few years as a result of the previous departmental external evaluation.

On Wednesday 18 September the panel visited the department facilities at the main University campus. The program included a tour of the facilities (classrooms and lecture halls, computer labs, student reading room, research labs) and separate meetings with:

1. the administration unit of the department
2. the teaching staff (in 2 separate meetings, first with EDIP staff and then with DEP staff of the department)
3. Students
4. Graduates
5. Employers and social partners

The visit concluded with a final meeting with OMEA members where the panel had the chance to request additional clarifications regarding any pending issues and a closing meeting with OMEA, MODIP and Prof. Kostas Buraselis, Advisor of the Rectorate on Academic Affairs and International Relations at the National and Kapodistrian University of Athens. It should be noted that because the on-site visit took place during the university examinations period, the Committee was unable to observe any teaching or interact with students during breaks or informal meetings. The AP also notes that (possibly due to the same reason), the proportion of senior members of staff attending the various meetings was small compared to the actual number of full professors in the department.

The Committee believes that the on-site visit was the most useful, indeed essential, source of information. In particular, the person-to-person exchanges that took place in formal meetings and informal conversations established a healthy and open atmosphere for exchange of ideas and provided the most reliable foundation for a fair and accurate evaluation. The personal contact and in-depth information that arose from the on-site visit was especially beneficial in both supplementing and correcting impressions that had been left by the submitted documents. Most, if not all faculty members and students who attended were open, forthcoming, and fully

participatory. The commitment of all staff members to their specific disciplines and to their students became especially evident and prominent during the meetings, tours, and discussions.

The AP was overall impressed by the quality of work performed at the department. Undoubtedly the department offers one of the top programs of Informatics and Telecommunications in the country. The AP focused its report in highlighting areas for even further improvements.

III. Study Programme Profile

The Department of Informatics and Telecommunications of the National and Kapodistrian University of Athens is located in the city of Athens as part of the main University Campus. The department started in 1986 as an interdisciplinary/interdepartmental undergraduate program between the departments of Physics and Mathematics was transformed into an independent department in 1989 part of the Faculty of Sciences of the National and Kapodistrian University of Athens. It currently offers 1 undergraduate program of studies with 6 specializations and 3 departmental and 5 interdepartmental/multi-university postgraduate (master) programs of studies. It also offers a doctoral program of studies. Since its formation it had graduated 2952 Undergraduate, 1577 master and 312 doctoral students. Its undergraduate program of 240 ECTS spans into 8 semesters (four years) of studies, although most of the students usually take longer to complete. Graduates acquire knowledge and skills in informatics, telecommunications or both. As part of their studies students complete either a thesis or an industrial placement or both.

Based on the latest data of the HQA (years 2017, 2018) the undergraduate program admits around 250-300 students per year (although the department requests for a 120 student intake the actual number of new students is much higher due to increased numbers set by the Ministry of Education plus additional transfer students from other universities). The total number of registered undergraduate students was 2400 (44.13% of which are registered for less than 4 years, 5.83% for 5 years, 5.45% between 5 and 6 years, 44.59% above 6 years. It is especially noted that based on the HQA data 94.05% of the students take longer than 6 years to graduate.

The department went through two external evaluations (one in 2000 and one in 2011) and as a result of the external evaluation in 2011 it had revised its program of studies in 2013.

The department has 44 faculty members (7 assistant professors, 7 associate professors, and 21 full professors and 12 emeritus professors), 18 laboratory instruction staff (EDIP), 5 special technical laboratory staff (ETEP) and six administrative personnel.

The faculty attracts substantial external research funding that enables it to employ a large number of postdoctoral researchers but also to acquire the needed funds for upgrading its infrastructure (including buildings, computing equipment and software).

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Academic Unit Policy for Quality Assurance

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 ALL INSTITUTION'S AREAS OF ACTIVITY, AND PARTICULARLY AT THE FULFILMENT OF QUALITY REQUIREMENTS OF UNDERGRADUATE PROGRAMMES. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit is in line with the Institutional policy on quality, and is included in a published statement that is implemented by all stakeholders. It focuses on the achievement of special objectives related to the quality assurance of study programmes offered by the academic unit.

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

...cular, in order to carry out this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

a) *the suitability of the structure and organization of the curriculum;*
b) *the pursuit of learning outcomes and qualifications in accordance with the European and the National Qualifications Framework for Higher Education;*
c) *the promotion of the quality and effectiveness of teaching;*
d) *the appropriateness of the qualifications of the teaching staff;*
e) *the enhancement of the quality and quantity of the research output among faculty members of the academic unit;*
f) *ways for linking teaching and research;*
g) *the level of demand for qualifications acquired by graduates, in the labour market;*
h) *the quality of support services such as the administrative services, the Library, and the student welfare office;*
i) *the conduct of an annual review and an internal audit of the quality assurance system of the undergraduate programme(s) offered, as well as the collaboration of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU);*

Study Programme compliance

The University has established an appropriate Quality Assurance policy clearly defining review processes and Key Performance Indicators (KPIs). The department is in line with the institutional policy. The MODIP is monitoring and enforces the Quality Assurance. The continuous improvement of the above is assured by a committee consisting of 9 members from the department (OMEA). The OMEA is in line with MODIP for the improvement of the

undergraduate program and MODIP seems to be closely monitoring the implementation of the policies of ADIP. The department's general assembly maintains overall responsibility for reviewing the study programme in its entirety and ensuring its adherence to the institutional Quality Assurance standards.

The department has a positive attitude towards quality assurance evaluations and feedback is taken seriously by the bodies of the department. Such positive evidence is the investment the department has put in revising the structure of the study programme and organization of the curriculum as a result of the comments of the evaluation report after an external evaluation in 2013. The curriculum also follows established standards in the delivery of Informatics and Telecommunications curriculum by being aligned to the ACM/IEEE curriculum.

The faculty engages in high quality and quantity of research activity resulting in substantial funding (based on the powerpoint presentation of the department it participated in projects worth 85M euro from 2010-2018) and research outputs making the department one of the top (as evident by international rankings) research-active Informatics and Telecommunication departments in Greece and internationally. Linking of teaching and research is actively pursued mainly through the thesis projects. It is noted that a number of graduates of this program pursue graduate (MSc and PhD) studies at the department and are also employed as researchers on research projects. Some undergraduate theses with some additional effort have been published in international journals and conferences.

Although a QA policy is in place, periodic reviews of the program seem to be performed informally and the flow of documentation relevant to it is not formalized. The undergraduate studies committee is responsible for revisions to the program but does not seem to maintain minutes of its meetings, and discussions at the general assembly related to the undergraduate program seem to be centered around solving problems as they appear than being based on a systematic, annual program review process that checks goals and KPIs and defines new strategy, priorities and goals. The AP suggests that the department implements a process where: (a) student feedback is complemented by self-assessment reports by members of staff regarding their teaching and support to the UG program, (b) student feedback, staff self-assessments and other evidence are being discussed by the UG committee (possibly in collaboration with OMEA) where the program of studies goes through annual review based on international standards (e.g. following annual review templates from the British education system), (c) the annual review is discussed in length at the general assembly and actions are defined with clear deadlines and allocation of roles, and (d) the UG committee monitors the implementation of these actions and informs the general assembly regularly about progress.

During the meeting with the students, it became apparent that the department actively promotes their involvement in the evaluation process of the teaching. Unfortunately though, the completion rate of such surveys is still low and the participation of student representatives in the general assembly although safeguard by the law in practice is not implemented due to opposition by the student unions. This creates a situation where the voice of the students is expressed only through informal channels that the department had to adopt.

Panel judgement

Principle 1: Institution Policy for Quality Assurance	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. Ensure that all relevant policy documents pertaining to the department are always available and easily accessible but also regularly discussed at staff and student meetings.
2. Take steps at departmental, institutional, and state level for ensuring the actual participation of students in the decision making bodies of the program.
3. The periodic reviews of the program should be formalized, well documented, and embraced by all.

Principle 2: Design and Approval of Programmes

INSTITUTIONS SHOULD DEVELOP THEIR UNDERGRADUATE PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE PROGRAMME. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES, THE INTENDED PROFESSIONAL QUALIFICATIONS AND THE WAYS TO ACHIEVE THEM ARE SET OUT IN THE PROGRAMME DESIGN. THE ABOVE DETAILS AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

Academic units develop their programmes following a well-defined procedure. The academic profile and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the National Qualifications Framework for Higher Education are described at this stage. The approval or revision process for programmes includes a check of compliance with the basic requirements described in the Standards, on behalf of the Institution's Quality Assurance Unit (QAU).

Furthermore, the programme design should take into consideration the following:
- *the Institutional strategy*
- *the active participation of students*
- *the experience of external stakeholders from the labour market*
- *the smooth progression of students throughout the stages of the programme*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System*
- *the option to provide work experience to the students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the programme by the Institution.*

Study Programme compliance

The programme of study was developed in accordance to the relevant policies of the institution. The Internal Quality Assurance System aims to achieve a high-level of quality in the operation of National and Kapodistrian University of Athens and of the undergraduate Programme Informatics and Telecommunications. The program of study aims to incrementally show the continuous improvement of its educational and research work, as well as the high quality and efficiency of its services, in accordance with the international practices of the European Higher Education Area as well as the principles and guidelines of ADIP. As part of these policies, the institution's Quality Assurance Unit (MODIP) oversees the process of internal and external evaluation of the University's academic departments and their programmes.

The overall structure of the department's degree programme aligns well with similar programs in Greece and follows the discipline's broad curriculum guidelines. However the AP is not fully satisfied with the level of periodic review compliance in relation to the department's adherence to Quality Assurance policies and standards, as stipulated by Hellenic Quality Assurance (HQA/ΑΔΙΠ) code of practice. Considering the latter, by evaluating the level of compliance at the local level, the department's Study Programme Committee as the responsible body to

review the courses and program's compliance with regards to the efficiency and quality, does not schedule meetings at regular time-frames to review periodically the curriculum, and as a result no minutes were recorded to be reviewed by the AP. Although there is a policy on reporting on the planning, design and delivery of the curriculum as well as monitoring the overall coherence of the academic provision and monitoring student outcomes, no evidence exists to support that these policies and regulations are followed. In addition there is no code of practice or policy that assists faculty members to evaluate the progress or the potential updates that the courses and/or program requires and/or needs.

The department and the School support the students towards their smooth transition to the labor market (before and after graduation) by providing them with information and advice on labor market status and services as well as the continuation of their studies in Greece and abroad. Unfortunately, neither job / career counselling services are offered in an organized way (through a career office) on individual or group level, nor seminars and workshops on subjects such as CV composition, selection process and interview as well as job search techniques are provided as a service to the students.

It is important to highlight the commitment of the department to the importance of external engagement. In addition, academic staff in this area builds a very good ground to expand further towards this direction. However, the implementation state of these plans is unclear, and the committee has concerns as to the extent to which the department can execute on its plans, especially as they relate to collecting meaningful and actionable feedback from the students and external stakeholders.

Panel judgement

Principle 2: Design and Approval of Programmes	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

The department should continue to consider the further improvement of the interaction opportunities between the students (and staff) with external network and stakeholders. The already established excellent relations with external bodies will provide a more extrovert profile for the department and the University overall. The AP feels that the following should be met in order to comply with the quality policies and performance indicators as follows:

1. Department's Undergraduate Programme Committee as the responsible body to review the courses and program's compliance with regards to the efficiency and quality, should schedule meetings at regular time-frames to review periodically the curriculum and maintain detailed meeting minutes to be accessible at any time.

2. There are some courses like practicum (internship) and final project thesis that do not have any course outlines so that all stakeholders (students and faculty members/employers) can get informed on what is specifically required for these courses. Therefore, there should exist a course outline for these courses as well, indicating the exact requirements and assessment components of the courses.

3. As job and career counselling services are not currently offered in an organized way (through a career office) on individual or group level, the department should assign and form a committee that will be responsible for these matters and organize seminars and workshops on subjects such as CV composition, selection process and interview as well as job search techniques.

4. The department's faculty members should employ innovative and efficient procedures for collecting meaningful and actionable feedback from the students and external stakeholders.

Principle 3: Student- centred Learning, Teaching and Assessment

INSTITUTIONS SHOULD ENSURE THAT THE UNDERGRADUATE PROGRAMMES ARE DELIVERED IN A WAY THAT ENCOURAGES STUDENTS TO TAKE AN ACTIVE ROLE IN CREATING THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement 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, enabling flexible learning paths;*
- *considers and uses different modes of delivery, where appropriate;*
- *flexibly uses a variety of pedagogical methods;*
- *regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement*
- *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys;*
- *reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff;*
- *promotes mutual respect in the student - teacher relationship;*
- *applies appropriate procedures for dealing with students' complaints.*

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;*
- *the regulations for assessment take into account mitigating circumstances*
- *assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;*
- *a formal procedure for student appeals is in place.*

Study Programme compliance

After the previous external evaluation, the department performed an extensive curriculum revision in 2013, that resulted in their current program of study (ΠΠΣ). As part of this revision, they created two main pathways within the department, namely Computer Science (CS) and Electrical and Computer Engineering (ECE), adopted the recommended ACM/IEEE curricula respectively, and consulting those of top-tier Universities in Europe and U.S.A., such as EPFL and Stanford. More recently, and after taking into consideration student and faculty feedback, the department also revised the ECTS credits for several courses with heavier load, thus reducing the total (minimum) number of courses needed to obtain the degree to 41 in total.

This change also reflected the diverse needs of students and allowed for more focused study pathways, such that students only take core courses that are necessary for their specialization. Based on the new curriculum structure, and apart from the two major pathways, students are required to take 2 years of core courses, while they are provided much more flexibility in the upper division, with several options for the core specialization and the technical elective courses, giving the students the ability to select up to 2 out of 6 specializations. The department also offers the option to take specialization in pedagogy. The department has established the practice of videotaping and making available all the lectures so that students can attend the lecture remotely or refer to the lecture in later time when preparing for the examinations.

After review of the provided course syllabi, the AP observed that that the majority of the courses, and especially those in upper division provide several assessment components for each course, including (but not limited to) tutoring sessions (φροντιστήρια), labs (εργαστήρια), individual assignments, and project as part of the student assessment, in addition to the final examination. However, several courses still exist where the final examination amounts to more than 70% of the final grade, with little or no interim assessment/feedback mechanisms for the students. After discussion with students, it was also brought to our attention that in other courses, assessment is "incremental" - i.e. students who fail in any of the earlier parts of the assignments of the course, are not allowed to progress through the course. Such practices introduce a heavy load and a big level of anxiety and uncertainty to the students.

After the 2013 curriculum development, the department also introduced the option for "Project" courses, spanning 4 different types of courses (2 per pathway). The focus of this course is to encourage hands-on learning, and at the same time help students further develop "soft" skills, such as team participation, leadership, presentation skills, etc. However, this course does not have a course outline yet, and, after discussions with OMEA, faculty, and students, the AP felt that there is not a concise and consistent set of measurable learning outcomes that students can follow and achieve. The same observation was made for the culminating experiences, namely the thesis and the internship, not allowing for a more uniform and fair evaluation process across the student body. Finally, there seems to be very little involvement of students in research through participation in research labs, other than having a thesis tied to one of those.

While the department has already revised the ECTS of some courses to reflect their increased load, the AP observed that there exist still discrepancies between ECTS points and the actual load for some more "heavy" upper division courses (with heavy project/programming components, as compared, e.g. to lecture-only Math courses in the first years).

The department informed the AP that they just recently created these course outlines. However, the impression of the AP was that there is no established policy of making these accessible to the students in advance and across the entire curriculum, rather it is at the discretion of each faculty member to do so.

After discussions with faculty, staff, and students, the AP also identified an issue with timely publication of grades in some courses, which introduces a high level of uncertainty to students, and limits the available time for studying, especially between the spring semester and the fall examination period.

In terms of student satisfaction, the department has a long-established practice of collecting student satisfaction surveys between weeks 8-11 of the semester. This is done in electronic format. The rate of participation is rather low, and, since these can provide valuable feedback to both the instructor, as well as the department, several ways to encourage and increase participation should be considered. It seems that currently, in cases of major issues with particular course sections, there is either bigger participation in such surveys, or informal conversations with the Chair and other involved members to bring these to their attention. Nevertheless, even informal, it is the impression of the AP that the department takes steps in improving the courses and overall curriculum when major issues arise (e.g. very large course load).

Any student complaints are usually communicated to the Chair, who tries to resolve any conflicts before escalating it to higher levels or referring students to appropriate organizations within the University (e.g. counseling). However, there does not currently exist a clearly defined (and broadly communicated) formal procedure for student appeals.

The department's provisions for accessible access, both physically and electronically, in various forms and capacities, is commendable. After discussions with the administrative staff, the AP was also informed that students are encouraged to participate in the process, if eligible, on a volunteer basis.

In general, the committee observed that the department is committed to fostering a student-centered learning environment and promoting mutual respect and has taken several steps towards this direction.

Panel judgement

Principle 3: Student- centred Learning, Teaching an Assessment	
Fully compliant	
Substantially compliant	**x**
Partially compliant	
Non-compliant	

Panel Recommendations

1. While there exist several informal processes, there seems to be a lack of well-established policies that govern several parts of the student learning, teaching and assessment:
   a. The advance dissemination of course outlines to students (e.g. by first week of classes), and their enforcement (i.e. making sure that grading scheme and component assessment will not change through the end of the semester).
   b. A formal procedure for student appeals.
   c. A policy for what constitutes an acceptable time of posting grades.

2. The department needs to consider the broader dissemination of the above and existing policies related to students' rights and responsibilities (appeals, academic integrity, etc). This could be done in various ways, e.g., during orientation week, the student handbook (οδηγός σπουδών), the web site, etc.

3. The department should ensure that all courses offering ECTS, including the project, thesis, and internship, should have course outlines with clear learning objectives and assessment rubrics tied to them to facilitate consistent and fair grading across the student body.

4. The faculty should commit to encourage and further increasing the type and number of variety of pedagogical methods, as well as a fair distribution of ECTS points that align with the expected load of the course.

5. The department's commitment to fostering a student-centered learning environment should continue by further working to reduce and eliminate "single point of failure" courses and encourage continuous assessment and monitoring of students (E.g. final exam should amount for <70% of final grade / Project-based assessment in several courses should be assessed and broken down into parts with partial percentage towards the final grade.)

6. While there exist numerous research projects and research labs in the department, it seems that the participation of undergraduate students is limited to conducting thesis related to these topics, or at one of the affiliated research centers through internships or scholarships.

7. The department needs to develop effective ways to collect measurable and actionable feedback from students and increase the response rate (e.g., through incentives and by integrating the feedback into the educational and administrative process).

Principle 4: Student Admission, Progression, Recognition and Certification

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

Institutions and academic units need to put in place both processes and tools to collect, manage and act on information regarding student progression.

Procedures concerning the award and recognition of higher education degrees, the duration of studies, rules ensuring students progression, terms and conditions for student mobility should be based on the institutional study regulations. Appropriate recognition procedures rely on institutional practice for recognition of credits among various European academic departments and Institutions, in line with the principles of the Lisbon Recognition Convention.

Graduation represents the culmination of the students´study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

Study Programme compliance

The department has an on-boarding process for all incoming students supporting them towards a smooth transmission to higher education and the department. At the beginning of each academic year, it implements a daily event with presentations of the department, its activities, laboratories, infrastructure and services provided. A freshmen handbook ("Οδηγός Πρωτοετών") with instructions on several processes and services, is also made available through the department's home page.

Student progression is monitored as a whole, however students' individual progress is not currently systematically monitored. The department has a well-established role of Academic Advisor, although only a handful of students take advantage of it, while several prefer to consult with faculty members they feel more comfortable with instead of meeting with their assigned advisor. There also exists the role of "Student Advocate" (Συνήγορος του Φοιτητή), however after discussions with faculty and students, the AP is under the impression that this is not a well-known service to either of the two parties.

Student mobility is encouraged via the ERASMUS project. Through discussions with students, the AP came to understand that some of the previous agreements are no longer in place, or that they exist with Universities without viable options (w.r.t. quality and type of courses offered) for the students.

ECTS is applied across the curriculum, and the department has made efforts, taking into consideration student and faculty feedback, as well as the findings of the previous external visit, to adjust the ECTS credit in accordance to the load of the respective courses. Through the AP's discussion with students and overview of the course outlines, it was made evident that there is need for a more integrated, well-documented revision of the courses and re-distribution of ECTS

points to courses that require continuous involvement from the students (e.g. through semester-long lab/programming assignments).

The programme offers several options for culminating experience to the students, by allowing them to take two semesters of Thesis or Internship, or one of each. The AP was impressed by the breadth of opportunities provided by external collaborators, in both public and private sector, who offer internships to students. Most recently, the department established the concept of a 3-way agreement such that students can receive paid internships in companies without being restricted by the government-provided ESPA positions. At the same time, this introduced some hurdles in the department's collaboration with public schools, that can no longer participate in such schemes. However, since there is no course outline with clearly stated course learning objectives and assessment rubrics, the evaluation in this culminating course relies on a report provided by the employer and the student at the end of the internship and overviewed/graded by the faculty member in charge.

For students who decide to do a Thesis, there is no formal procedure currently in place, nor a course outline and thesis handbook to assist students in the process and outline the key quality requirements for such an achievement.

While HQA (ΑΔΙΠ) informed the AP that the diploma supplement should be automatically generated for each student, currently the department provides it on demand.

Overall, after discussions with students and the external network, it was evident that the department produces graduates of very high standard, that are ready to become members of the workforce. The internship program is deemed as valuable and a preferred method from many students, who also employ this as a pathway to the job market. The collaboration with research centers (Demokritos and Athina) is also an invaluable asset that allows more research-oriented students to be involved in interesting cutting edge projects. Students are also offered options to be placed in schools. Both internship and thesis could become a great opportunity for students to develop additional soft skills (e.g. group work, presentation), and such components could become ubiquitous part of the experience, if well established (and assessed) via the respective course outlines.

Panel judgement

Principle 4: Student Admission, Progression, Recognition and Certification	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. The role of the Academic Advisor has to be applied to its full potential, with the establishment of appropriate mechanisms and well-defined processes, aiming at the

monitoring and improvement of the overall academic performance of all students. Furthermore, although the university has a Student Advocate office "Συνήγορος του Φοιτητή" the AP noticed that all parties (staff, students, graduates) were not aware with the existence of such an office.

2. Development of diverse quality processes for monitoring, evaluation and enhancement of students' progression, including the involvement of the Academic Advisor.

3. Relations to the external network, should be enhanced and extended in order to continuously identify, evaluate, and incorporate job-specific or broader skills as learning outcomes, in the programme's curriculum.

4. Given the programme's specialization on pedagogy, the department should consider ways (e.g. through funded projects) to support internship placements in elementary/secondary schools to further foster the existing ties and give students who wish to take such path equal opportunities as those who wish to work in the industry.

5. The department should align with HQA's quality criteria and issue a diploma supplement without request for all graduates.

Principle 5: Teaching Staff

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE QUALIFICATIONS AND COMPETENCE OF THE TEACHING STAFF. THEY SHOULD APPLY FAIR AND TRANSPARENT PROCESSES FOR THE RECRUITMENT AND DEVELOPMENT OF THE TEACHING STAFF.

> *The Institutions and their academic units have a major responsibility as to the standard of their teaching staff providing them with a supportive environment that promotes the advancement of their scientific work. In particular, the academic unit should:*
>
> - *set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognize the importance of teaching and research;*
> - *offer opportunities and promote the professional development of the teaching staff;*
> - *encourage scholarly activity to strengthen the link between education and research;*
> - *encourage innovation in teaching methods and the use of new technologies;*
> - *promote the increase of the volume and quality of the research output within the academic unit*
> - *follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training etc.);*
> - *develop policies to attract highly qualified academic staff;*

Study Programme compliance

The department is blessed to have a group of high quality, committed faculty members and special teaching staff (ie. EDIP). They maintain the highest standards in their teaching and research duties. The selection and promotion of the teaching staff of the department follow the well-established procedures mandated by Greek law and observed by all universities in Greece. These rather complex rules are common to all Greek Universities. The department has set up and follows transparent processes for the recruitment of qualified staff. Special emphasis is given in highlighting the importance of teaching and research.

It is important to highlight that the department makes full use of the limited means available for assuring professional faculty development. The professional development budget has of course to be aligned with the overall financial situation of the National and Kapodistrian University of Athens and of the budget allocated to the Department of Informatics and Telecommunications and the Greek economy.

Currently, Erasmus and sabbatical leaves are the only means for teaching staff mobility. According to the department's resources 3-4 new faculty members are on sabbatical leave every semester, a fact that demonstrates the ability for consistent and frequent mobility.

The AP observed a very significant effort of the teaching faculty to bring quality research into the undergraduate classrooms. An approximation of 10% of the students are putting efforts in producing new knowledge by authoring (co-authoring) a research paper as part of their thesis work.

Panel judgement

Principle 5: Teaching Staff	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The panel recommends that the department:

1. Should establish frequent (at least once every two years or annually) self-assessment procedures for its faculty. This could be facilitated by the creation of a self-report (Faculty Activity Report) for all faculty where they will be asked to report their teaching/research/service achievements/participation in the current academic year. This will help the faculty to prepare their tenure and/or promotion dossiers and also provide them and any external/internal evaluation committee to glance over their achievements on a particular year or set of years.
2. Establishes a rotation in the teaching of the basic compulsory undergraduate courses, which will facilitate the load sharing but also will introduce new elements in the teaching.
3. Should make every effort to increase the percentage of student participation in the course evaluation process every semester. While the current percentage (about 20%) is satisfactory, an increase would give the department a more informative tool to monitor the quality of the courses.

Principle 6: Learning Resources and Student Support

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER TEACHING AND LEARNING NEEDS. THEY SHOULD –ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT AND–ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, BOARDING, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient funding and means to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means could include facilities such as libraries, study rooms, educational and scientific equipment, information and communications services, support or 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 or international students, students with disabilities) and 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 ensures that all resources are appropriate, adequate, and accessible, and that students are informed about the services available to them.
In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.

Study Programme compliance

The department is financially self-sustainable due to its successes in securing external research funding. This has enabled the department to invest in infrastructure upgrade and maintenance creating an education environment that is of international standards, that is positively commented by the AP.

The Department of Informatics and Telecommunications is housed in the premises of the School of Sciences on the main campus of the university. The department has its own Amphitheaters for theoretical courses and well-equipped laboratories with the necessary equipment and software for laboratory courses and for the preparation of undergraduate theses. The classrooms of the department have modern audiovisual and computer equipment, as well as high-speed network connection and the department streams courses through the e-class system. More specifically the infrastructure of the department includes:

- Classrooms: Amphitheater (330 seats), Class A1 (110 seats), Class A2 (110 seats), 6 additional smaller classrooms.
- Three (3) Meeting Rooms.
- 5 Independent Workshop areas
- 10 Training/computer Labs

A number of research labs are also used for demonstrations and small exercises as part of undergraduate lectures.

The students have access to the faculty of science library (which unfortunately due to time constraints the AP was not able to visit) which, based on the internal evaluation report, has a

good collection of print and electronic resources. The department through its own resources has also established a reading room for the students that is open daily from 09:00-19:00. Of note is that although there is a public space (yard) surrounded by the various buildings the students raised the issue that there are no common areas where they could sit and either work on their projects/courseworks or socialize (this becomes even more pressing when the weather is bad as the capacity of indoor common spaces is limited to the labs and the reading room). The AP thinks that such facilities might help in establishing a sense of community among the students and faculty.

The department has implemented a practical placement program that provides the students with opportunities for training and future employment in industry. In addition, a small number of students each year get the chance for international mobility through the ERASMUS program. From our meeting with the students it became evident that although there is a large number of bilateral agreements with international institutions not all agreements are active in practice.

Student housing and recreation (sports etc.) options are provided by the central university facilities. The students also have access to various other resources through the central university (email access, e-class system, Language center, nursery, health services). The university also has a well-established services (including accessible buses) for disabled students and staff that is actually managed by a member of staff of the department under evaluation.

The Department has established a system of academic advising that seems to be appreciated and used by the students although the process and allocation of advisors can be improved and formalized. Unfortunately, although the university had a career center the AP was informed it has closed, leaving the students with limited exposure to career advising and soft skill training.

Panel judgement

Principle 6: Learning Resources and Student Support	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. The department as an effort to further enhance a sense of community, should re-design the public spaces to encourage teamwork and the creation of common areas for students to meet and interact with their classmates and the department staff.

Principle 7: Information Management

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

> *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 as well as to the academic community.*
>
> *Reliable data is essential for accurate information and for decision making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on study programmes and other activities feed data into the internal system of quality assurance.*
>
> *The information gathered 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 programme(s)*
> - *availability of learning resources and student support*
> - *career paths of graduates*
>
> *A number of methods may be used for collecting information. It is important that students and staff are involved in providing and analyzing information and planning follow-up activities.*

Study Programme compliance

The AP recognizes that information and associated resources, as well as student support, are significantly impacted by the financial constraints imposed on the entire higher education sector in Greece. The AP also wishes to note that the Library and its digital resources was not inspected due to time constraints, as it is located in a separate building/location. The learning and teaching environment is appropriate and of high quality with all supporting equipment in the premises, while the provision for disabled access is highly commendable.

The MODIP of NKUA is responsible for overseeing the continuous improvement of its academic provision and research outputs, as well as the efficient operation of its academic services, in accordance with international practices and the guidelines stipulated by ADIP. For this purpose, National and Kapodistrian University of Athens has established a set of principles for the collection of data regarding students, teaching staff, course structures, annual monitoring, assessments, etc.

Efficiency measurements include quantitative and qualitative indicators which provide valuable and reliable information, the collection of datasets encompassing the number and categories of indicators per quality objective, and their analysis and reporting for the purpose of supporting higher level decision-making.

Panel judgement

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

Panel Recommendations

The AP recommends that the department prioritises the opportunities derived from having flagship stakeholders of the market as partners. This can be achieved if the department:

1. Establishes formal and systematic processes for eliciting input from stakeholders besides its students, including but not limited to external ones like industrial partners and alumni, but also internal ones like administrative and technical staff as well as its own faculty members. It should also establish processes of evaluating this input and proposing specific actions based on it.

2. Performs dedicated surveys involving students, alumni and the industry regularly and establishes procedures to incorporate the results in the assessment process.

3. Tracks the alumni of the department as currently there are no evident established mechanisms that alumni are monitored and contacted in an organised way.

Principle 8: Public Information

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES WHICH IS CLEAR, ACCURATE, OBJECTIVE, UP-TO-DATE AND READILY ACCESSIBLE.

Information on Institution's activities is useful for prospective and current students, graduates, other stakeholders and the public.
Therefore, institutions and their academic units provide information about their activities, including the programmes they offer, the intended learning outcomes, the qualifications awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students, as well as graduate employment information.

Study Programme compliance

The department's website contains information about its facilities, staff, undergraduate and graduate degree programs and guides, announcements, events, policy of quality assurance, and internal assessment reports. This information is provided in the form of web-pages, in the form of downloadable PDF documents, or both. The information especially that related to the degree programme is well-organized. Many courses also have an e-class component, through which students can get access to all materials of the course, access their grades, contact their instructor and peers, etc. While a short description and the ECTS units are available to students, the AP did not locate link to the comprehensive course outlines through the course catalog. Moreover, the AP could not find policies related to students' rights and responsibilities (appeals, academic integrity, etc).

The majority of the content is also offered in English, although some pages are under construction (in English). Moreover, the research-oriented information (publications, research projects, Ph.D. theses etc.), linked from the home page of the department, leads to a legacy web site and the information is not up to date (latest updates were in 2007). The AP was informed that the department is in the process of transferring to a new web site, and is considering ways to automatically consolidate all research-related activity from its faculty members. However, and given that one of the department's strengths lies in the quality of research performed by the faculty members, updating this information should be of highest priority.

Panel judgement

Principle 8: Public Information	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. The department should ensure that all information provided through the web site, is up to date.
2. The department should disseminate any policies and regulations related to students' rights through the web site.

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes

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

Regular monitoring, review and revision of study programmes aim to maintain the level of educational provision and to create a supportive and effective learning environment for students.

The above comprise the evaluation of:
- *the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date;*
- *the changing needs of society*
- *the students' workload, progression and completion;*
- *the effectiveness of the procedures for the assessment of students*
- *the students' expectations, needs and satisfaction in relation to the programme;*
- *the learning environment, support services and their fitness for purpose for the programme*

Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date. Revised programme specifications are published.

Study Programme compliance

The department's study program is of high quality and remains overall up to date and follows the appropriate international standards. Based on the input from the external network (industry stakeholders), the quality of the programme's graduates is up to the industry standards, and the majority of graduates are well-prepared and ready to join the workforce.

Admittedly, and to maintain a high quality and a thorough coverage of the topics of the degree, the workload is rather heavy resulting in students delaying their graduation by 2 years or more on average. The department is encouraged to continue revising the curriculum by ensuring that the mapping of course load to ECTS is consistently and fairly done across all courses offered.

The department has established an internal evaluation procedure carried out yearly by the internal evaluation team (OMEA). The department submits the results of this process to the QAU/MODIP unit of the institution for processing at the institutional level. The OMEA was required to generate annual reports until 2016. Since then, MODIP only requests the KPIs from OMEA, without any additional annual evaluation (self-assessment) report. This results in a disconnect between the Objectives set by the department ("Στοχοθεσια") and the KPIs measured.

In particular, according to AP's observations, there does not currently exist a well-defined procedure enabling the continuous monitoring and improvement ("close the loop") that ties KPIs to Objectives and respective action items. While several action items are tied to each Objective, there is there is limited (or no) availability of well-documented and communicated action plans in order to remedy whatever problems uncovered by the self-assessment process. Currently this seems to be performed in a rather ad-hoc basis, where, when issues arise, some

decision is made (usually in the Undergraduate Curriculum Committee) and approved by the department, without follow-up (formal) assessment on how these changes will achieve the desired actions.

In addition, there is lack of documentation with regards to how input collected in various forms (student feedback surveys, staff self-assessments, other evidence discussed by the UG committee) was taken into consideration in determining specific improvement actions (e.g. revising the ECTS points to align with a course's workload).

The department should ensure that the self-assessment results should be shared among all members of the academic unit (including faculty, students, and non-teaching staff).

Panel judgement

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

1. The department should ensure and demonstrate connection between the overarching objectives, action items, and KPIs and set up well-documented processes that would allow it to achieve continuous improvement of the undergraduate program.
2. For any problem identified by the annual internal evaluation, the department should provide well-defined and measurable actions.
3. The department should establish formal, well-defined procedures to elicit, use and evaluate feedback from students and external stakeholders.

Principle 10: Regular External Evaluation of Undergraduate Programmes

PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY COMMITTEES OF EXTERNAL EXPERTS SET BY HQA, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HQA.

HQA is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HQA grants accreditation of programmes, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the template's requirements, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees.

Both academic units and institutions participate in the regular external quality assurance process, while respecting the requirements of the legislative framework in which they operate.

The quality assurance, in this case the accreditation, is an on-going process that does not end with the external feedback, or report or its follow-up process within the Institution. Therefore, Institutions and their academic units ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.

Study Programme compliance

There are numerous aspects of the Department of Informatics and Telecommunications of NKUA that validate a very good practice and the quality of the knowledge offered to students. It is important to note that department's commitment to the spirit and the processes of Quality Assurance is evident in many principles and aspects. Both faculty and staff are committed to excellence and very hard to support the students both academically and personally. Students and recent graduates were really happy with their student experience and were praising the efforts of the department's and University's employees. The department is of the highest possible quality and a valuable asset of the NKUA.

Based on the information gathered during the site visit, it appears that the faculty, lab personnel, and administrative staff are aware of the importance of the external review process and its contribution to improvement. All stakeholders of the programme were actively engaged in the external review, although we noticed that there are weaknesses in monitoring the courses efficiency and overall the program progress and students' satisfaction. Another important consideration is that there is no input (recorded or during a scheduled/dated meeting with minutes) from students on the program. As there is no monitoring methodology that has been solidly followed in the department (but only policies that is not evident that is followed) for the program to assess its efficiency and knowledge acquisition as well as the assessment of each one of the courses individually, the AP feels that the department should engage all stakeholders towards achieving this goal.

Panel judgement

Principle 10: Regular External Evaluation of Undergraduate Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The AP recommends the following:

1. The development of an action plan for the department to assess and ensure the implementation of the appropriate external evaluation suggestions and recommendations.
2. The department's faculty members should employ innovative and efficient procedures for collecting meaningful and actionable feedback from the students and external stakeholders. In addition, in all their actions and committee meetings should formally be recorded in minutes so that actions formally can be then applied with assigned responsibilities.

PART C: CONCLUSIONS

I.   Features of Good Practice

The AP was overall impressed by the quality of the work performed at the department. Undoubtedly the department offers one of the top programs of Informatics and Telecommunications in the country. The AP focused its report in highlighting areas for even further improvements. Examples of good practice:

1. The program recruits high quality students and graduates students with good prospects of employment. Unfortunately this is diluted by the large number of transfer students who often achieve entry into the program with a much lower entrance score than the initial intake from entrance exams.
2. The department has strong links with external stakeholders (social, governmental, industrial)
3. The department has a very strong research profile that creates opportunities for exposure of the undergraduate students to such practices.
4. The department is financially self-sustainable due to its success in securing external research funding. It is evident that this income is channeled in creating excellent infrastructure and resources for the students and staff (e.g. facilities, software, teaching and research labs, opportunities for mobility).
5. The revised program of studies is well aligned with QA standards and international standards (e.g. ACM/IEEE).
6. Both academic and administrative staff display a wonderful team spirit that was evident in the meetings during the AP visits.

II.   Areas of Weakness

1. While there exist several effective informal processes, there seems to be a lack of formalizing these processes into policies that govern several parts of the student learning, teaching and assessment.
2. Although there is a stated departmental vision, there is a lack of monitoring and implementation of the department's vision and its currency to sustain its long term leading role.
3. There is an absence of career counseling services at the university level.
4. Although the level of intake students through entrance exams is high, there is a large number of transfer students (often with a much lower entrance exam score) making the composition of the student body uneven introducing additional challenges to the learning process for all students.
5. The student unions seem to create obstacles in the smooth participation of the students in the decision making bodies of the department.

6. There is improvement in the adhering of the department to HQA procedures and standards but similarly there are areas for further improvement in that direction (see recommendations below).

III.   Recommendations for Follow-up Actions

1. Ensure that all relevant policy documents pertaining to the department are always available and easily accessible, but also regularly discussed at staff and student meetings. The department needs to consider the broader dissemination of the existing policies related to students' rights and responsibilities (appeals, academic integrity, etc). This could be done in various ways, e.g., during orientation week, the student handbook (οδηγός σπουδών), the web site, etc.

2. Take steps at departmental, institutional and state level for ensuring the actual participation of students in the decision making bodies of the program. The department's faculty members should employ innovative and efficient procedures for collecting meaningful and actionable feedback from the students and external stakeholders.

3. The periodic reviews of the program should be formalized and embraced by all. The department's Undergraduate Programme Committee, as the responsible body to review the courses and program's compliance with regards to the efficiency and quality, should schedule meetings at regular time-frames to review periodically the curriculum and maintain detailed meeting minutes to be accessible at any time.

4. As job and career counselling services are not currently offered in an organized way (through a career office) on individual or group level, the department should assign and form a committee that will be responsible for these matters and organise seminars and workshops on subjects such as CV composition, selection process and interview as well as job search techniques.

5. The department should ensure that all courses offering ECTS, including the project, thesis, and internship, should have course outlines with clear learning objectives and assessment rubrics tied to them to facilitate consistent and fair grading across the student body.

6. The faculty should commit to encourage and further increase the type and number of variety of pedagogical methods, as well as a fair distribution of ECTS points that align with the expected load of the course.

7. The department's commitment to fostering a student-centered learning environment should continue by further working to reduce and eliminate "single point of failure" courses and encourage continuous assessment and monitoring of students (e.g. final exam should amount for <70% of final grade / Project-based assessment in several courses should be assessed and broken down into parts with partial percentage towards the final grade, etc.).

8. While there exist numerous research projects and research labs in the department, it seems that the participation of undergraduate students is limited to conducting thesis related to these topics, or at one of the affiliated research centers through internships or scholarships.

9. The department needs to develop effective ways to collect measurable and actionable feedback from students and increase the response rate (e.g., through incentives and by integrating the feedback into the educational and administrative process).

10. The role of the Academic Advisor has to be applied to its full potential, with the establishment of appropriate mechanisms and well-defined processes, aiming at the monitoring and improvement of the overall academic performance of all students. Furthermore, although the university has a Student Advocate office "Συνήγορος του Φοιτητή" the AP noticed that all parties (staff, students, graduates) were not aware with the existence of such an office.

11. Development of diverse quality processes for monitoring, evaluation and enhancement of students' progression, including the involvement of the Academic Advisor.

12. Relations to the external network, should be enhanced and extended in order to continuously identify, evaluate, and incorporate job-specific or broader skills as learning outcomes, in the programme's curriculum.

13. Given the programme's specialization on pedagogy, the department should consider ways (e.g. through funded projects) to support internship placements in elementary/secondary schools to further foster the existing ties and give students who wish to take such path equal opportunities as those who wish to work in the industry.

14. The department should align with HQA's quality criteria and issue a diploma supplement without request for all graduates.

15. The department should establish frequent self-assessment procedures for its faculty. This could be facilitated by the creation of a self-report (Faculty Activity Report) for all faculty where they will be asked to report their teaching/research/service achievements/participation in the current academic year. This will help the faculty to prepare their tenure and/or promotion dossiers and also provide them and any external/internal evaluation committee to glance over their achievements on a particular year or set of years.

16. The department should establish a rotation in the teaching of the basic compulsory undergraduate courses, which will facilitate the load sharing (particularly applied also for the final year Thesis) but also will introduce new elements in the teaching.

17. The department should make every effort to increase the percentage of student participation in the course evaluation process every semester. While the current percentage (about 20%) is satisfactory, an increase would give the department a more informative tool to monitor the quality of the courses.

18. The department, as an effort to further enhance a sense of community, should re-design the public spaces to encourage teamwork and the creation of common areas/social spots for students to meet and interact with their classmates and the department staff.

19. Establishing additional strategic partnerships with stakeholders could be used to provide more students with placement opportunities thus providing a direct path to employability and enhancing the career paths of graduates in the long term.

20. The department should track its alumni as currently there are no evident established mechanisms that alumni are monitored and contacted in an organised way.
21. The department should ensure and demonstrate connection between the overarching objectives, action items, and KPIs, and set up well-documented processes that would allow it to achieve continuous improvement of the undergraduate program.
22. For any problem identified by the annual internal evaluation, the department should provide well-defined and measurable actions.
23. The department should establish formal, well-defined procedures to elicit, use and evaluate feedback from students and external stakeholders.
24. The department should ensure that all information provided through the web site, is up to date.
25. The department should disseminate any policies and regulations related to students' rights through the web site.
26. The development of an action plan for the department to assess and ensure the implementation of the appropriate external evaluation suggestions and recommendations.

The AP considers that if the department was to implement the above recommendations it could become a QA leader in Greece of top international QA excellence.

IV.   Summary & Overall Assessment

The Principles where full compliance has been achieved are:

1, 4, 5, 6, 8, 10

The Principles where substantial compliance has been achieved are:

2, 3, 7, 9

The Principles where partial compliance has been achieved are:

N/A

The Principles where failure of compliance was identified are:

N/A

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

The members of the Accreditation Panel

Name and Surname   **Signature**

1. Prof. Panayiotis Zaphiris
   Cyprus University of Technology, Cyprus

2. Prof. Constandinos Mavromoustakis
   University of Nicosia, Cyprus

3. Prof. Magdalini Eirinaki
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