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ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC
HQA
HELLENIC QUALITY ASSURANCE
AND ACCREDITATION AGENCY

Accreditation Report

for the Undergraduate Study Programme:

Informatics and Telecommunications

Institution: University of the Peloponnese
Date: 10/12/2018

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Ευρωπαϊκή Ένωση
Ευρωπαϊκό Κοινωνικό Ταμείο

Επιχειρησιακό Πρόγραμμα
Ανάπτυξη Ανθρώπινου Δυναμικού,
Εκπαίδευση και Διά Βίου Μάθηση
Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης

ΕΣΠΑ 2014-2020

ENQA
EUROPEAN ASSOCIATION
FOR QUALITY ASSURANCE
IN HIGHER EDUCATION

Report of the Panel appointed by the HQA to undertake the review of the Undergraduate Study Programme of Informatics and Telecommunications of the University of the Peloponnese 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 and Telecommunications of the University of the Peloponnese** comprised the following four (4) members, drawn from the HQA Register, in accordance with the Law 4009/2011:

1. Professor George Karypis (Chair)
   University of Minnesota, United States of America

2. Professor Magdalini Eirinaki
   San Jose State University, United States of America

3. Professor Dimitris Kotzinos
   University of Cergy Pontoise, France

4. Dr. Paraskevas Dalianis
   UniSystems S.A. , QUEST Group, Greece

II.   Review Procedure and Documentation

The panel was established on November 7th, 2018 and the final notice of the body of the panel members as well as the support material for the accreditation process and report were provided electronically by November 14th, 2018. Thus, the panel had 12 days between the reception of the material and the start of the work in Athens, Greece. The documentation and the supporting material provided to the panel included:

- the evaluation guide created by HQA,
- the mapping grid, created by HQA, which was very helpful in mapping the contents of the different principles to questions to be answered during the site visit,
- the accreditation proposal ("Πρόταση Ακαδημαϊκής Πιστοποίησης του ΠΠΣ") prepared by the Department,
- a set of annexes with the accreditation proposal, explicating various issues and providing detailed information; including the study guide, course descriptions, policies' documents, etc,
- a set of documents presenting quality indicators both for the department and the study program,
- the report of the 2011 external evaluation conducted by HQA for the Department of Computer Science and Technology, which later on merged to the current Department, and
- a set of presentations used by the HQA staff members to present the purpose, goals and procedures of the accreditation.

The panel asked for some additional information on the 26th of November and the Department made every effort to provide most of the answers the next day, while some data were still missing. The panel would like to express its gratitude to the Department's faculty for providing information even in the last minute and express its overall appreciation for the material provided to it. Given the size and complexity of the material, the panel felt that some additional days before the beginning of the accreditation process would have been beneficial. The panel would also like to thank the HQA staff for the continuous and laborious effort to collect and share the necessary material.

The individual panel members studied the material separately and arrived in Athens for the first meeting on November 26th, 2018, at the HQA headquarters in Athens. The panel departed in the afternoon of the same day for Tripoli where the Department of Informatics and Telecommunication is established. The site visit lasted one day (27/11/2018) and was successfully concluded by 19:00, at which time the panel members returned to Athens. The site visit was under a very tight schedule, which is described right after:

09:00 - 09:30 Meeting with the Deputy Rector/President of MODIP & the Head of the Department

09:45 - 11:45 Meeting with OMEA & MODIP representatives

12:00 - 12:45 Meeting with teaching staff members

13:00 - 13:45 Meeting with students

14:00 – 15:00 Lunch break

15:00 – 16:00 Visiting classrooms, lecture halls, libraries, other facilities

16:00 - 16:30 Meeting with graduates

16:30 – 17:00 Meeting with employers, social partners

17:00 - 17:30 Debriefing meeting

17:30 - 18:00 Meeting with OMEA & MODIP representatives

18:00 - 18:15 Closure meeting with the Vice-Rector/President of MODIP, the Head of the Department, OMEA & MODIP representatives

The site visit was very interesting but the programme was very tightly arranged so the panel had to go faster in various circumstances and also delayed discussions with some of the external stakeholders. Nevertheless, the visit was well organized and the panel would like to express its appreciation to HQA and the Department's faculty for their arrangements.

The panel met for the next two days in Athens in order to start creating the report of the visit, which was successfully done, since the panel members managed to discuss and start writing all the different aspects of the report. Naturally it was not possible to create the report in just two days, so the panel continued working on it even after the departure of its members.

III.   Study Programme Profile

The Department of Informatics and Telecommunications is located in the city of Tripolis and is part of the University of the Peloponnese. The Department was established in 2013 by combining the University's Departments of Computer Science and Technology and Telecommunications Science and Technology that already existed in Tripolis and were initially established in 2002. The Department offers both bachelor, postgraduate (masters), and doctoral degrees. Its bachelor degree requires at least four years of studies and provides its graduates the skills necessary to work in the general fields of informatics, telecommunications, or both. The professional rights of the graduates of the Department of Informatics and Telecommunications are equivalent to the rights of the graduates of the relevant Greek University departments.

In the three academic years from 2015 to 2017, the Department admitted 598 students (~199 each year) and graduated 264 students (88 each year). Over these three academic years, the percentage of students that graduated within 6 years (n+2) was 27.4%, 40.7%, and 41.0% of the total graduating students, respectively. Over the same period, the number of actively enrolled students was 1107, 1167, and 1086, respectively. All these numbers put together, indicate that, on the average, approximately 55% of the admitted students either transfer to another institution or drop out.

The Department has 25 faculty (1 lecturer, 8 assistant professors, 7 associate professors, and 9 full professors), 10 laboratory instruction staff (EDIP), and three administrative personnel (one full time and two part time).

From the information that was provided, a significant percentage of the Department's students and faculty do not live near campus but they commute from Athens.

The Department's facilities span two different buildings that are about one kilometer away from each other.

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.

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 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.

In particular, 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 Department has established an appropriate Quality Assurance (QA) Policy for its undergraduate program, clearly expressing its commitment to supporting its continuous development and improvement. The Department has defined a number of objectives covering most of the required aspects for its study programme, such as those related to teaching methods, student satisfaction, learning outcomes, and research output.

Although a number of suitable KPIs have been specified, and an association among them and the Department's goals is provided, it appears that there is an inconsistency among the various goals, principles, and actions at different parts of the Accreditation Proposal provided ("Πρόταση Ακαδημαϊκής Πιστοποίησης του ΠΠΣ"). The "strategic goals" in the KPI document ("ΠΑΡΑΡΤ_ Ε - Στοχοθεσία και προγραμ δράσεων.pdf") do not match the goals outlined in the accreditation proposal's main document. As is the case now, such goals are not currently being sufficiently monitored and as a consequence, cannot be effectively utilized towards the improvement of the study program.

To promote continuous improvement, a number of Committees have been established, i.e., those for Strategic Planning, Undergraduate Studies, ERASMUS and International Relations, Research planning, and Internal Evaluation Committee. According to the KPI document, these Committees in close cooperation with faculty members and other departmental bodies, are working towards continuous improvement. The Department's commitment to continuous improvement is evident by the fact that it has already incorporated a fair number of the recommendations that were done in 2011 when its informatics undergraduate programme (the then Department of Computer Science and Technology) was externally evaluated.

However, following the feedback received during the site-visit, the Quality Assurance (QA) Policy has not yet been sufficiently communicated to all parties, and therefore, it appears that there is still quite limited active contribution of some stakeholders to its establishment and evolution. This remains valid especially for the students and external stakeholders. At the same time, limited student participation in the teaching evaluation process, low response rates in the evaluation surveys, and thus, limited and not reliable feedback data, do not provide sufficient, reliable, and actionable information towards applying the QA policy effectively in teaching. This is mainly due to the fact that students were not sufficiently aware, as was found during the meetings with their representatives, of the benefits of their active contribution in this quality process and the adequacy of the teaching evaluation process. Finally, It appeared that, external stakeholders have limited, if any, involvement to QA policy evaluation and enhancement, and there are not currently well-defined processes and review bodies, which might seek their contribution.

Panel judgement

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

Panel Recommendations

1. The Department has to improve the consistency among the various goals, principles, and actions defined. Concrete associations among the "strategic goals" in the KPI document

and the goals outlined in the accreditation proposal's main document have to be created and well documented.

2. The Department should complete the definition of achievable, relevant and timely goals, regarding the study programme, covering all aspects of those related to teaching methods and their effectiveness, student satisfaction and accomplishment of the learning outcomes. Procedures and mechanisms towards evaluating and achieving the expected results may also be defined.

3. The Department should work towards the enhancement of the communication and coordination among the Department's different committees, eliminating overlaps and improving their efficiency.

4. The Department should improve communication of its QA policy to all stakeholders (including students and external ones) in order to extend, enhance, and facilitate their active contribution to its continuous improvement process.

5. The Department should identify and invite additional external stakeholders, like organizations, companies and institutions with applied knowledge and experience in quality systems, who might contribute to periodical QA policy evaluation and enhancement. To that end, the establishment of review/consulting bodies of external stakeholders, is encouraged.

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 Department's degree programme was initially developed in 2013 by combining the degree programs of two pre-existing departments (Department of Computer Science and Technology and Department of Telecommunications Science and Technology). The degree programme requires the completion of 240 ECTS units out of which 126 ECTS units are obtained from the 21 required core courses that all students need to take, 24 ECTS units are obtained by completing a thesis, and the remaining 90 ECTS units are obtained by completing various upper division courses. The students have the option of declaring one of two upper division tracks (Informatics and Telecommunications) or not declaring one. If they choose to declare a track, then as part of their 90 ECTS units, they need to take 12 courses (4 required and 8 electives) that are part of their track, which leaves only 30 ECTS units to be used to take courses outside their track. In designing its curriculum and the structure of its degree programme the Department took into consideration international curriculum guidelines that are provided by the primary professional societies of its discipline (ACM and IEEE) and the structure of similar programs at other universities in Greece. The degree programme was initially designed by the Department's degree programme committee and was approved by the Department's general assembly.

The overall structure of the Department's degree programme aligns well with similar programs in Greece and follows the discipline's broad curriculum guidelines. In addition, the degree

programme does an outstanding job in articulating the set of learning objectives that wants its students to meet at time of graduation. However the degree programme does not provide a complete mapping between the stated learning objectives and the set of courses that students need to take in order to achieve them. Even though each course description provides a set of general and discipline-specific learning outcomes, the way this information is provided, makes it hard to determine if all of the stated learning objectives are met and which courses are required to meet a specific learning objective. For example, it is hard to determine if the set of courses that a student is required to take are sufficient to meet the program's stated learning objectives of having its students develop communication and life-long learning skills. In addition, the panel felt that certain elements of the curriculum are somewhat dated (e.g., too much emphasis in the C programming language), some of the core courses are too peripheral for one or the other track, and that some of the track-required upper division courses are too specialized to be required (e.g., computer security and human-computer interaction) by all the students that take the track. The panel was also concerned with the very small number of prerequisites in the core courses, especially for courses that thematically depend on each other and are part of prerequisite chains in similar programs in Europe and the United States (e.g., Programming I and II, Discrete Mathematics and Data Structures, Discrete Mathematics and Algorithms and Complexity, Data Structures and Algorithms and Complexity, etc.). Not having the appropriate prerequisite structure and enforcing it, can potentially put students that take such courses in the wrong order at a disadvantage.

The Department has a process in place that it uses to periodically update the content of existing courses and introduce new courses to its curriculum. This process involves an initial consideration of the proposed changes/additions by the Department's undergraduate studies committee and a subsequent consideration by the Department's general assembly. The overall structure and driving principles of the above process are reasonable and it has already been used to perform several course revisions. However, thus far, these changes have been driven only by the faculty and they have not considered or solicited feedback from any other stakeholders (e.g., students, external experts, companies, etc.). Also, it is not clear from the information that was provided and also the discussion during the visit, if there is a formal process for eliminating existing courses.

The programme's accreditation proposal has also outlined a comprehensive process that the Department is planning to use to annually revise its study program. This planned process contains all the right components and puts forth ambitious plans of soliciting and incorporating feedback from all stakeholders into the revisions of the degree program. 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	
Partially compliant	**X**
Non-compliant	

Panel Recommendations

1. The Department needs to precisely specify how the stated learning objectives of its degree programme are satisfied by the courses that it offers and how they are assessed.
2. The Department should update the prerequisite chains of courses to match the dependencies of their content and needs to create a visual representation of the prerequisite chain to aid the students in course planning and selection.
3. The Department must design and perform meaningful surveys to help it gather information from all stakeholders, especially students, alumni, and employers, in order to inform degree programme updates towards addressing issues related to curriculum modernization, streamlining the required core courses with the upper-division tracks, and updating the track-required courses.
4. The Department should implement its plans for ongoing degree programme updates.

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

A student-centered learning approach has been adopted to some extent by the Department. Based on the study guide and data provided to the panel by the OMEA, 37.14% of courses include a lab, 37.14% include required assignments, 25.71% optional assignments, and 10% include midterm exams. It is noteworthy that after assessing some earlier feedback on the preparedness of students on specific skills the Department introduced additional tutoring sessions available to all students.

Students are encouraged to develop individual skills through individual and group assignments and projects, and are given the opportunity to participate in research-oriented projects in

several labs. All students are required to work on a thesis during the last two semesters of their studies.

The way the curriculum is structured allows for a great flexibility to the students to select alternative pathways to degree based on their individual preferences. This has been a characteristic that the students seem to appreciate a lot in the degree. They also felt that the combination of skills in informatics and telecommunication gives them a competitive advantage in the market. However, there were also some concerns with regard to the balance of classes offered by the Department each academic year. The committee observed that while there exists a balance between the Informatics and Telecommunications courses that exist, these courses are not offered with the same consistency. While the majority of students, as discussed with the Chair and faculty members of the Department graduate with an Informatics specialization, the majority of courses offered fall under the Telecommunications track. Moreover, several courses which appear on the study guide and seem to align better with the students' demands (mostly informatics courses) are never offered to the students. Finally, a strong connection of the theory to applications seems to be missing in several parts of the curriculum.

According to the programme's accreditation report, the study guide, and as verified by the students, the assessment criteria for each class are being made clear in the beginning of the semester. Various alternative ways are accommodated to assist students who have disabilities. Moreover, all students are often given the opportunity to participate in optional projects offered as part of the class.

An issue that emerged after our discussion with a group of students was that sometimes for low-attendance courses, the instructors substitute the course with a term project. This practice demotivates those students that would actually show up for lectures, whereas it is unclear if it is sufficient to cover the stated broad and diverse set of learning objectives that are met by a semester-long lecture-based course. The panel strongly believes that the delivery of lectures (and in general following the teaching plan of any course) should not be correlated to the attendance by the students and that such practices degrade the students' education experience.

There is a well-defined process for student appeals. This process is outlined in the study guide. However, many students were not aware of this policy, although the group of students who were interviewed said that any potential problems are usually solved on a personal level directly with their instructor. The panel did not see any discussion as to when the students are made aware of their rights and responsibilities (appeals, academic integrity, etc.).

The Department fosters an open-door environment making students comfortable to meet with their instructors for a various number of topics. The Department has recently established the role of Academic Advisor but this has not been implemented yet. It is expected that each faculty member will be the Academic Advisor of 50 students (on average). Though the panel is very enthusiastic with the creation of this new role, it is not clear if the Department has taken into consideration how these additional responsibilities will impact the faculties' other responsibilities.

In terms of assessment and continuous improvement, the Department currently lacks an effective way to collect feedback from the students. The response rates in the student evaluation questionnaires are very low.

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

Panel judgement

Principle 3: Student- centred Learning, Teaching and Assessment	
Fully compliant	
Substantially compliant	
Partially compliant	X
Non-compliant	

Panel Recommendations

1. The faculty should commit to increasing the type and number of variety of pedagogical methods. After discussions with several stakeholders it became evident that other than enhancing student-centered education, this could also act as a motivating factor to increase student engagement and lecture attendance.
2. While there seems to be a practice of inviting some of the highest-performing students to participate in more advanced projects in the various labs, this should be an opportunity made available to the entire student body to ensure the equal treatment of students.
3. Given the variety of pathways to a degree, the Department should provide to its students formal academic and career advising. This advice, to be offered by the Academic Advisors, needs to be personalized.
4. The Department needs to keep the curriculum up to date by updating the content and selection/frequency of courses offered to the students, as informed by the feedback received by stakeholders such as the students and employers. A focus on tying theory with applications should be fostered across the curriculum.
5. The Department needs to set clear rules on when a class should be cancelled or not (e.g., classes with low enrollment, or classes with projected low participation rates).
6. The Department needs to set mechanisms that monitor and ensure the proper delivery of lectures by the teaching staff, regardless of the size of student participation.
7. The Department needs to consider the broader dissemination of policies related to students' rights and responsibilities (appeals, academic integrity, etc). This could be done in various ways, e.g., during orientation week, included in the Department's "survival guide", made more easily accessible via the web site, etc.
8. 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 maintains an on-boarding process for all incoming students supporting them towards a smooth transmission from high school to higher education. 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 guide to the life in the city of Tripoli, as well as the Department's facilities and services, is also provided to every new student. Although the Department has introduced the role of the Academic Advisor, this role has not been fully deployed yet, and has not been incorporated as early as possible and upon students' introduction and orientation activities.

Based on the information provided, it seems that students' individual progress is currently not monitored in a systematic fashion, and the role of the Academic Advisor has not yet been leveraged towards systematically supporting students in their academic life.

As was mentioned in the presentations during the site visit, as well as the provided accreditation proposal, the Department encourages students' mobility. There is a committee responsible for identifying various opportunities that provide further educational and training experiences in foreign institutions via ERASMUS or other organizations within Greece. Besides, it encourages students' active participation in the activities of the various labs or associated research teams in short term projects and during the undergraduate thesis. However, communication of this practice is not communicated to the student community in a systematic way.

The Department is expanding its network, including social, cultural, and productive bodies, who occasionally contribute in various aspects of its teaching and research policy, and in some cases provide alternatives for the implementation of the settled practical training of students. However, network development is currently based on ad-hoc initiatives of its faculty and related activities are not systematically monitored and evaluated.

The Department has fully applied and maintains ECTS across its curriculum, and continuously updates its study programme adapting to international standards and practices.

As the Thesis is considered a mandatory requirement for graduation, the Department provides a Thesis Handbook, which outlines the key quality requirements for such an achievement. Although the recommended list of quality requirements described in the handbook may be enhanced, it is considered that the examination committee may sufficiently evaluate the thesis and grade the outcome.

A Diploma Supplement is automatically provided to all students upon graduation, following a University-wide policy. The Diploma Supplement contains information on the courses the student has successfully passed and the specialization followed, if any.

Panel judgement

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

Panel Recommendations

1. Enhancement of communication to the student community for the different student programme options, like that of Traineeship different approaches, student mobility, midterm projects, etc.
2. 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 improvement of the overall academic performance of all students on a personal and collaborative approach. This must become one of the priorities of the Department, as it is expected that it might contribute towards stimulating students' interest, attendance and active participation in the Department's life.
3. Engaging the role of the Academic Advisor, as early as possible to student's life in the Department, even upon students' introduction and orientation (welcome) events.
4. Development of diverse quality processes for monitoring, evaluation and enhancement of students' progression, including the involvement of the Academic Advisor. Quality improvement and exploration of additional measures towards raising students' engagement, attendance and potentially academic performance.
5. Network development should be well-defined, organized and sufficiently monitored. Continuous evaluation and reporting mechanisms should be put in place, keeping track of its progress and achievements.
6. Engagement of a variety of external bodies to all aspects of Studies through appropriate procedures.

7. 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.
8. Special efforts have to be spent on further enhancing the connections between the Department and the local community, as well.
9. Build stronger connections with the industry towards expanding internships, which should also be a source for enhancing research collaboration between the department's faculty and industry.

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 fortunate to have teaching staff (faculty, special teaching staff (ΕΔΙΠ), temporal teaching staff) of high quality that exhibits important commitment to their teaching and research responsibilities. 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.

The Department has limited means for assuring professional development opportunities for its staff members. Consequently, the existing efforts are rather limited and inadequate to ensure the participation of all faculty members and in a more frequent manner. This is by no means the sole responsibility of the Department and it is aligned with the overall situation in the country and the University of the Peloponnese.

The mobility of the teaching staff is encouraged but the only means available are Erasmus+ visits and sabbatical leaves. The Department makes every effort to support the staff members who asked for a sabbatical leave. The number of sabbatical leaves per year is mandated by law and it is equal to the 10% of the Department's staff, which in this case means two (2) to three (3) staff members per year. According to the Department's faculty about two of them are in sabbatical leave every year but no official numbers were provided for that. We need also to praise the collegiate atmosphere in the Department, which materializes to the fact that the staff members showed great willingness to support each other by teaching the courses of those who will be on sabbatical leave. There was no evidence if sabbatical leaves apply also to members of the special/supporting teaching staff (ΕΔΙΠ). The number of teaching staff on sabbatical seems appropriate for the size of the Department. On the other hand, the number of Erasmus+ exchanges for the teaching staff seems rather low and an effort should be made to increase them.

The teaching workload of the teaching staff seems appropriate and within the boundaries of the law. There is some imbalance in the teaching loads as presented in the accreditation proposal

submitted by the Department, since there is a percentage of the staff teaching the bare minimum and another percentage teaching 50% or more in excess. This was explained as a voluntary contribution to the teaching of the Department, involving teaching of highly specialized research-related courses, which staff members teach because they want to attract students in their research agenda. The important point though is that the basic, compulsory and of high-load courses of the Department are evenly distributed among staff members and possibly rotated among them. Data for the actual distribution of the teaching was not provided. Nevertheless, the panel deems the overall load distribution among the members of the Department appropriate in a way that allows them to perform research and devote considerable amount of time to it. Also, the ability of the Department members to teach courses in their research area as part of their regular teaching load is recognized and it is a valuable step towards combining teaching and research activities.

Besides this, other evidence contributes to the fact that the Department is making a considerable effort to link teaching and research. Elements like the number of offered elective and highly specialized courses offered to the students of the last years and the ability of the students to undertake individual assignments to one of the Department's labs and be supervised by a member of the teaching staff. Usually these assignments have a research direction, while allowing the student to be properly introduced in a research area. Finally, the thesis that each student has to do at the end of the studies has usually a research part and the teaching staff uses them in order to initiate students into research. No actual numbers of how many theses actually have a research output were provided but the panel found the effort to have research-oriented theses commendable and supports the strengthening of the link between teaching and research through the undergraduate theses.

The evaluation of the teaching staff of the Department is an area of concern. On one hand, there are established processes of evaluating the teaching staff every semester by asking the students to fill electronic questionnaires/surveys through the electronic system of MODIP. While this is a commendable, highly private process, the problem is that the student turnout is extremely low making the results of the process mostly unusable and thus, making teaching evaluation infeasible. This situation is difficult to remedy but the Department should intensify the efforts to persuade and incentivize the students to participate in the process, since this is directly linked with the evaluation of the faculty members and their professional advancement. On the other hand, the panel is concerned about the absence of other assessment methods in place like for example peer evaluations by other staff members. Additionally, there is a lack peer mentoring especially by more experienced staff members to newly appointed ones. The peer mentoring could be extended beyond teaching to other staff activities like proposal grant writing, etc.

Additionally, the Department needs to work harder and more consistently into providing a more complete and comprehensive research strategy. While efforts are in place, especially with the establishment of the Committee for Strategic Design (Επιτροπή Στρατηγικού Σχεδιασμού), the Department need to go beyond assembling the ideas of the existing research labs that provide some information on the strengths of the Department in various research areas and articulate a research strategy, describe it in concrete terms and design and implement measures to support it.

Panel judgement

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

Panel Recommendations

The panel recommends that the Department:

1. Clarifies and publishes a set of criteria that would be advisable to members that are to be hired or promoted and differentiate by rank; while these criteria will not be necessarily taken into account by the different selection committees that will be established by the Department for hiring or promoting (since this is mandated by law), the Department will provide a strong indication of the quality it is looking for.
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. Alternatively teaching of the same course by more than one faculty members could be considered.
3. Establishes a seed funding mechanism to the extent possible to support internally the research and professional development of its members, especially the newer ones.
4. Establishes peer review processes among its members both for teaching and research evaluations and combine those with the ones by the students.
5. Establishes mentoring processes for junior faculty in order to support their first steps towards teaching at high level and successful grant proposal writing.
6. Involves more the PhD students of the Department in the teaching process; this will contribute to a better integration between teaching with research.
7. Establishes a comprehensive research strategy and establish various criteria in order to evaluate the implementation of this strategy by the faculty members.

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 has 7 lecture rooms in the main building and uses 2 rooms and the amphitheater at the Economic Department's building. The rooms have projectors. Depending on the size and type of room, they contain either desks and chairs, or just chairs. The big amphitheater accommodates only seating but there is no desk for the students to enable note taking or working on a laptop. Some rooms where these desks are embedded to the chairs had some chairs with the desk component broken.

The two buildings, both located in the outskirts of Tripoli (there is a bus connection to the city), are approximately 1km away from each other. There is no pedestrian access between the two buildings so the students have to walk on the road (or take a bus).

The Department has access to a library with many national and international titles, as well as access to e-libraries via the library web site. According to the accreditation report, the Department has three labs that are equipped with PCs (total number of 75 PCs) and are open to all students, however the panel only visited one. The Department has 16 labs, each with specialized machines and other equipment and software. The panel visited several of these labs. These are used by faculty members who work on the specific research area, the EDIP member assigned to the lab, as well as the students who work on the lab's projects. It is not clear who is responsible for maintaining both the instructional and research labs, as no technical assistant is listed as part of the Department's staff.

The students can eat in the restaurant located next to the Department's main building. There are also two cafeterias, one in each of the University's buildings. Some students mentioned that the way the lectures are scheduled does not allow time for lunch break (i.e., there are classes scheduled when the restaurant is offering the main course of the day).

The University does not have student dormitories in Tripoli. This has been a complaint of all stakeholders, as everyone feels that this is one of the main reasons of low class attendance as out-of-town students who cannot afford to rent an apartment have no viable alternatives. The Department leadership is fully aware of this situation.

In order to provide students with career advice, the University has recently established a career office. This office, however, is located in a different city and is therefore not accessible by the students (in person). The Department has recently established the role of Academic Advisor. These advisors will be faculty members of the Department. This is expected to be the primary source of career advising for students, once the role is implemented.

Several other welfare-related services are available, however some of those are located in other cities, not Tripoli. The students can be informed about most available services via the University's website. The Department has created a so-called "Survival Guide" that is provided to all first-year students during their orientation. This guide also contains useful information about several academic and student life-related resources.

The Department has one full-time and two part-time administrative assistants. The students may request necessary paperwork via the University's e-Secretary online system. The administrative services are open to students on a limited schedule (two days per week, for a few hours).

Panel judgement

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

Panel Recommendations

1. Many classrooms need updating. Given the nature of the material taught the students should be able to have desks or some writing surface available to them at all times. Charging stations in case they have laptops would also be helpful.
2. The Department needs to ensure that there is Wi-Fi access in all parts of the building.
3. The Department, in close cooperation with the affiliated Department of Economics, the University and the local/regional authorities, should work towards realizing a safe and secure pedestrian access (e.g., a pavement) between the two University buildings.

4. The Department needs to consider the restaurant's hours of operation and schedule the classes such that sufficient time is allowed for students who want to have lunch there without missing the lectures.
5. The Department leadership should work with the University leadership and the Ministry of Education to ensure that student dormitories are created and offered to the students of the Tripoli annex as soon as possible.
6. Given the absence of accessibility to the career center, the Department needs to implement the role of Academic Advisor to provide the students with degree pathways/career counseling. This is only done informally and on a volunteer basis. The panel feels that this service needs to become mandatory to all students.
7. It is recommended that the secretariat (administrative services) extends their "office hours", i.e., when they are open for students, to cover more days and different schedules.

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 Department needs to make fast steps forward in the area of information management. There is a limited set of data being collected and this is restricted to the student evaluations of their courses at the end of each semester. This is a first necessary step and it remains highly partial if it is not coupled with the information collected concerning additional internal (e.g., members of the special teaching staff (EDIP), administrative and technical staff, etc.) and external stakeholders (industrial partners, alumni, etc.). Moreover, the limited participation in the survey, makes the use of the results almost without merit. The panel acknowledges that the Department is doing an effort to collect feedback by various stakeholders but this is done so far in a per case basis and in an uncoordinated way.

The Department is lacking an internal data collection process in order to collect and analyze data concerning its facilities, the equipment and the non-teaching services wherever applicable. The Department is using the existing system of the local QAU/MODIP, which is expected to be extended to cover additional surveys regarding external stakeholders and existing resources.

Panel judgement

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

Panel Recommendations

The panel recommends that 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 regularly and in a timely manner dedicated surveys involving students, alumni and the industry and establishes procedures to evaluate the results and turn them into action items.

3. Puts in place measures that will boost the participation of the various actors in the evaluation and feedback-collecting surveys. Especially for students, the evaluations should be tied to various elements of the educational and/or administrative process.

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 policy towards the timely dissemination of information related to teaching, academic activities, and quality assurance is to do so via its website. To this end, its website contains information about its facilities, staff, undergraduate and graduate degree programs and guides, research laboratories, 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 and comprehensive. In particular, the Department's Guide for Undergraduate Studies provides a wealth of information about the University, the Department, the structure of its degree program, graduation requirements, a detailed description of the available courses, and the course offering schedule of the current academic year.

When the information is provided both in web-pages and also in PDFs, it appears that the PDFs are up to date, whereas the information on the web-pages is not. For example, the list of courses that are shown on the Department's web-pages were last updated in 2016, and are somewhat different from those shown in the Guide of Undergraduate Studies for the 2018 academic year. This tendency of not maintaining the information shown in the Department's website also happens in other areas. For example, the most recent event that was shown in the "Department's Events" tab, which was a research talk, dates back to 2016. Similarly, the "Department's Announcements" page appears to contain up to date information related to programmatic events and deadlines, and nothing related to other activities that typically happen in a Department (e.g., invited talk, outreach events, visitors, awards, etc.). Similar dated information involves everything that has to do with research (e.g., research laboratories, research projects, and research collaborations). According to the "Last updated" timestamps, this information was last updated in April of 2016. Also, there are inconsistencies between the Greek and English versions of the website, with the Greek version containing additional and more up-to-date information. For example, the PDF of the undergraduate study guide that exists in the English version of the website is one year behind that of the Greek version.

The Department's website provides little information related to extracurricular activities, discipline-specific career services/guidance/advice and full-time employment opportunities (or links to the University's relevant web-pages), student's academic and professional organizations and groups (e.g., the local IEEE chapter), or mechanisms by which its alumni and other external

stakeholders to connect and remain connected with the Department and its activities (e.g., LinkedIn, Facebook, Twitter, etc.). In addition, the Department does not appear to have any regular communication strategy to connect with all of its stakeholders (e.g., periodic newsletter).

Panel judgement

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

Panel Recommendations

1. The Department needs to establish and follow processes in order to ensure that when the same information is maintained at different places, that information is consistent and up to date.
2. The Department needs to establish and implement a communication strategy in order to effectively and timely disseminate relevant information about its various academic, research, and social/community-related activities to all of its stakeholders.
3. The Department needs to develop a strategy to use its website and other social media towards establishing and maintaining a sense of community among the faculty, students, and all external stakeholders.

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 in general of high quality and, while there are some concerns about various specific courses and their placement in the study program, it remains overall up to date and follows the appropriate international standards. Both the students and the alumni are happy with the contents of the undergraduate study programme and the same opinion was shared by the (very few) members of the industry that the committee had the opportunity to meet.

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. This report contains a section on the evaluation and the evolution of the undergraduate study program. But this internal evaluation report partially meets the needs of the Department, since as established also earlier, the student participation to the assessment surveys is limited and there are no other self-assessment mechanisms in place besides the discussions in the Undergraduate Programme Committee. But these discussions are also done in an ad-hoc, in place manner without any procedure of officially recording the self-assessed needs and providing follow-up actions. The finding of this self-assessment report is shared among the staff members of the Department but due to privacy reasons, specific aspects are discussed only between the concerned staff members and the Department's Chair or the internal evaluation committee (OMEA).

There is no evidence of a widespread sharing of the results among the other members of the Department (students, non-teaching staff) and neither a formal process of collectively evaluating the results of the self-assessment. This is also coupled with the limited availability of well-documented and communicated action plans in order to remedy whatever problems

uncovered by the self-assessment process. The action plans provided in various forms by the Department are not very clear and, most importantly, there is no assessment of how these changes will achieve the desired actions, so that at the end of the day one could properly assess and decide whether the action plan followed was the proper one for the situation. Moreover, there is no clear description or evidence on how the programme updates take into account the evolving needs of the society and the work environment. For example, some of the reported actions around the curriculum (e.g. course merging or course introduction) do not come with a process of reporting results so one cannot know whether this was a successful change or not.

One of the important issues that the panel has identified is the lack of formal processes for involving students and external stakeholders in the monitoring, review and update of the study program. This happens either ad-hoc and in case-by-case basis (e.g. the students reported that they should take the initiative to personally contact faculty members or the Undergraduate programme Committee in order to discuss problems in the teaching process) or by performing surveys that are not well worked out before their execution (e.g. the alumni survey that was executed recently, whose results are of rather limited usability). The lack of formal processes in this respect means that the feedback especially by external stakeholders but also the students might not come in a timely and well-organized manner or might reflect personal biases.

Panel judgement

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

Panel Recommendations

The panel recommends to the Department to:

1. Establish formal, well-defined procedures to elicit, use and evaluate feedback from students and external stakeholders.
2. Provide well-defined and measurable actions for every problem identified by the internal evaluation.
3. Communicate the appropriate actions clearly to all stakeholders.
4. Involve external stakeholders in the form of an External Advisory Committee in order to elicit advice for issues around the study program.
5. Introduce clear, measurable action plans and set up processes that would allow it to achieve continuous improvement of the undergraduate program.
6. Introduce formal procedures for eliciting input from students and external stakeholders and additional procedures on making effective use of this input.

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 administering 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

It is the first time the Department's study programme is going through an accreditation review by an external evaluation procedure set by HQA. However, one of the predecessors of the Department (Department of Computer Science and Technology - DCST) completed an external evaluation by HQA in 2011, before it merged with the Department of Telecommunications Science and Technology in 2013. Furthermore, the study programme of the new academic unit has never undergone an external review conducted by Agencies other than HQA.

It has to be noted that the Department has already taken many actions towards adopting most of the relevant recommendations provided by the previous external evaluation processes of the previous Department of Computer Science and Technology. The successful results of these actions were recognized by the committee, not only from the information provided in section 10 of the programme's accreditation proposal, but from the site visit and the review of the study programme and other available material.

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 available stakeholders of the programme were actively engaged in the external review, although we noticed that there were not many representatives of some categories –like graduate and PhD students- available. This is probably due to the fact that, as mentioned, almost all of them are not located in Tripolis. At the same time, no representatives from the Laboratory teaching staff participated in the organized meetings, although some of them were available during the committee's visiting sessions in their laboratories.

It is expected that all stakeholders will be actively engaged to the appropriate extend to the follow-up actions upon their implementation, as the Department committed towards that.

Panel judgement

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

Panel Recommendations

1. The Department should make the best out of the final accreditation report and share the results, its recommendations and collaborate on its outcomes with each and every stakeholder.

2. The Department is advised to come up with follow-up yearly reports that would allow external entities (e.g. the University, the HQA, etc.) to follow the implementation of the recommendations included in this report (and possibly those -which remain relevant- of the External Evaluation report of the then Department of Computer Science and Technology in 2012, which unfortunately still contains valid advice). These intermediate reports should be made available to all stakeholders and the External Advisory Board (if instituted as suggested) so as countermeasures can be proposed when necessary.

3. The Department should identify and implement further actions in order to achieve better awareness of the quality assurance process among all stakeholders, enhancing their involvement in all aspects of the required activities.

PART C: CONCLUSIONS

I.   Features of Good Practice

1. The Department has introduced tutoring services to many of the core courses in their curriculum in order to address educational gaps of their students. This was done in response to the realization that one reason for the low graduation rate (or long time-to-degree) was the fact that the Department's students' high-school education was not as strong as required. The committee feels that this action provides strong evidence that the Department can take steps to improve its curriculum in a student-centered fashion in response to identified gaps (i.e., an example of continuous improvement). Students have responded positively to these changes, and anecdotal results show that the introduction of tutoring services has helped their course performance.

2. The Department has created and maintains a collegiate atmosphere between faculty and students, which helps in fostering learning.

3. The Department has an informal practice of engaging some undergraduate students in research projects and integrating them in the activities of various labs.

4. More than 30% of the ECTS units that are required by the degree come from elective courses. This provides the students with the flexibility of customizing their degree programme towards areas that align with their interests and future career plans. Such flexible academic pathways are extremely important and are a testament to the Department's commitment to student-centered education.

II.   Areas of Weakness

1. There are several inconsistencies in the various pieces of information that were provided to the accreditation panel, indicating that the activities of the different committees responsible for the material that went into the accreditation proposal were not well-coordinated. In parallel, many of the faculty were not aware about the content of the department's accreditation proposal, suggesting that the faculty were not fully engaged in every step of the process. These raise concerns about the overall commitment and buy-in of the department's faculty in the accreditation process.

2. The information provided in response to the different accreditation principles is confusing, indicating that the Department did not understand what it is being asked to provide.

3. The mechanisms employed by the Department to collect feedback from the various stakeholders (students, employers, alumni) suffer from the fact that either the response rate is very low to allow for reliable conclusions from the data, or they are not well-designed and done in an ad-hoc manner; thus, providing insufficient, unreliable, and not actionable information.

4. The Department has not adequately involved external stakeholders in its strategic planning and curriculum design. Moreover, there was limited involvement of external stakeholders in assessing its degree program.

5. Even though the Department has identified various KPIs for measuring the impact of its efforts of continued improvement, in many cases it did not describe the concrete actions that it will take to achieve them and the rationale behind them.

6. Even though the set of courses in the curriculum is diverse, not all of them are offered at the frequency that is needed to meet students' demand. In addition, for many courses, the integration of theory with applications could have been stronger.

7. The large number of students (both undergraduate and graduate) and faculty that do not live in Tripoli creates a number of challenges associated with course attendance, integration of research with education, peer-student mentoring, and the sense of a strong, tightly-knit academic community.

III. Recommendations for Follow-up Actions

1. The Department's leadership and its quality assurance committee (OMEA) has to ensure that all of the Department's relevant committees coordinate, sufficient time is provided for everybody to review the relevant material and reports, and ensure that all faculty members are engaged in the process.

2. The Department should design and implement a process for collecting feedback from all stakeholders in order to support its continuous improvement activities. Informed by this feedback, the Department needs to set measurable actions in order to implement changes and assess their impact. This should be a formal and documented process that will allow to trace the provenance of decisions related to the curriculum and the overall program.

3. The Department should regularly solicit the advice of external stakeholders on matters relevant to the degree programme and integrate their feedback in its continued improvement process. In addition, the Department should establish an external advisory board which should include alumni, industry representatives, as well as faculty from other Universities.

4. For the different KPIs that the Department plans to use to measure its efforts of ongoing improvement, it needs to articulate the actionable and measurable steps that it will undertake to improve them along with the rationale as to why these steps can lead to the desired changes. In addition, since the resources (both human and financial) available to it are finite, the Department needs to prioritize them so that to maximize its return on investment.

5. The Department needs to increase the frequency by which it offers some of its courses and update their content and teaching methods to better connect them with practical applications. This can be done by leveraging the current faculty to teach courses (and potentially introduce new ones) that are in subject areas related to their existing expertise, possibly in a co-teaching manner. In addition, it needs to update its overall teaching capacity to better align with the fact that the majority of its students select informatics-related courses. Note that the increase in teaching capacity can be done without necessarily increasing the number of faculty, by adapting a policy of rotating the core courses taught by the faculty to free up teaching capacity for elective courses in informatics.

6. The University needs to expedite the process of creating and offering to students housing facilities as a way to increase students' attendance in courses and the overall

participation in the Department's everyday life. This should be coupled with an improvement to the accessibility to the different parts of the campus. Additionally, the Department should take steps to increase the presence of graduate and Ph.D. students on campus, which will facilitate mentoring of undergraduate students and getting them involved in research.

IV.   Summary & Overall Assessment

The panel felt that the Department is committed to providing a high quality education to its undergraduate students and aspires to take the steps that are necessary to ensure its continuous improvement. The panel recognizes that this is the first time the programme is undergoing an external accreditation review, which can explain the various areas that the panel identified for further improvement and also that many of the planned processes have not been implemented yet. During the site visit, it became apparent that the Department values student-centered education; thus, the panel is confident that the Department will be able to fully execute on its plans for an effective and comprehensive process for quality assurance and continuous improvement in the near future.

The Principles where full compliance has been achieved are:

N/A

The Principles where substantial compliance has been achieved are:

1, 4, 5, 8, 9, 10

The Principles where partial compliance has been achieved are:

2, 3, 6, 7

The Principles where failure of compliance was identified are:

N/A

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

The members of the Accreditation Panel

Name and Surname

Signature

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2. Prof Dimitrios Kotzinos, Université de Cergy-Pontoise, France

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