



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



**Εθνική Αρχή
Ανώτατης Εκπαίδευσης**
Hellenic Authority
for Higher Education

Αριστείδου 1 & Ευριπίδου 2 • 10559 Αθήνα | 1 Aristidou str. & 2 Evripidou str. • 10559 Athens, Greece
T. +30 210 9220 944 • **F.** +30 210 9220 143 • **E.** secretariat@ethaae.gr • www.ethaae.gr

Accreditation Report for the Undergraduate Study Programme (Integrated Master) of:

Civil Engineering

Institution: Aristotle University of Thessaloniki

Date: 12 December 2020

Report of the Panel appointed by the HAHE to undertake the review of the Undergraduate Study Programme (Integrated Master) of **Civil Engineering** of the **Aristotle University of Thessaloniki** for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme (Integrated Master) of **Civil Engineering** of the **Aristotle University of Thessaloniki** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Professor Nikiforos Stamatiadis (Chair)**
University of Kentucky, USA
- 2. Professor Emeritus Dimitirios Kolymbas**
Universität Innsbruck, Austria
- 3. Professor Panagiotis Scarlatos**
Florida Atlantic University, USA
- 4. Associate Professor Antonis Zervos**
University of Southampton, United Kingdom
- 5. Parisi Mpillias**
Technical Chamber of Greece, Greece

II. Review Procedure and Documentation

The External Evaluation and Accreditation Panel (EEAP) met for the first time on November 30 to provide the required introductions of the team members and discuss the approach for the visit, the roles of the panel members, and process to be followed. The chair identified a series of documents to be reviewed prior to the site visit and the members agreed to complete the review before the first meeting on Monday, December 7. The first official meeting of the EEAP was on December 7 for the training session of the HAHE.

The onsite visit was conducted via online conference meetings due to COVID-19 travel restrictions and started on December 7 and lasted until December 9, 2020. The committee wrote the report in the following days (December 9-12) though collaborative meetings held also online.

The EEAP met initially the Department Head and the Vice Rector of Academic Affairs of the University where some initial presentations of the university and the department took place. The next session involved members of the faculty charged with the accreditation efforts (OMEA) including those at the university level (MODIP) and a discussion ensued to address some of the EEAP questions resulting from the documents that the EEAP had already reviewed. A detailed presentation of the various activities of the department regarding the study program, faculty and staff, student body, and research activities was provided to EEAP.

The second day started with a meeting with the faculty where a free-flowing question and answer period occurred. The Dean of the School of Engineering also attended the meeting. A session with current students in the program followed where their opinion was sought on several issues relative to the program, their experiences and course loads. The next session involved a review of the current facilities through a discussion to address EEAP questions. It should be noted that a pre-recorded video tour of the facilities was provided that EEAP reviewed prior to the meeting. The next meeting was with recent graduates of the program in order to gauge their experience and identify how well their studies are serving them in their current work environment. The final session of the day involved employers and partners of the program aiming to address the readiness of the graduates for the market as well as identify areas of cooperation between the department and employers.

The third day had two meetings; one with OMEA and MODIP to address any lingering questions and another with the Chair and Vice Rector along with the OMEA and MODIP members where additional questions were addressed and a quick summary of the visit was discussed.

Overall, the faculty and staff had prepared a rigorous visit program with presentations and discussions. They were open to discussion and eager to answer questions and show us both the strengths and the weaknesses of the program. The EEAP was impressed by the exemplary level of cooperation with all members of the Department. The EEAP was especially impressed with the students and recent graduates, their attendance, sincere views, collaboration and interest of the EEAP review.

A series of reports and other documents were provided to the EEAP prior and during the visit. The main documents that were used included the Internal Evaluation that the Department developed in 2020, the External Evaluation completed in 2013, the Curriculum Guide and course

syllabi, the evaluation metrics and goals for the future, and all operational guides of the Department. In addition, all PowerPoint presentations were provided with additional documents that demonstrated educational components for most sectors within the department.

It is apparent that the online discussion and meetings worked well and allowed for the completion of the program in a succinct manner. Obviously, the lack of any social interactions during the visit is detrimental to the overall approach, since they provide more insight on the various aspects of the program and allow for additional, oftentimes informal, feedback and discussions. If this process continues in the future, it may be desirable to spread the meetings over a longer period of time, since typically in-person onsite visits last three days.

III. Study Programme Profile

The Civil Engineering program has been in place since 1955 and it has been in the same building since 1960, when the buildings were constructed to house the School of Engineering. It was the first Department of the School and the largest since its inception. This is a 5-year program where students are required to complete a total of 54 courses (41 required and 13 elective) along with the completion of the Diploma Thesis and Practical Training, which is an elective course. The program has an equivalency of 300 ECTS and the Practical Training credits could be included as an elective course. Students can identify one concentration area (sector) in which they select their elective courses and then complete their thesis on similar thematic areas. Students also have the opportunity to select courses among all four concentration areas and thus have a more generic knowledge of a variety of topics. The Department has developed a fairly detailed Curriculum Guide to ensure that students understand the program and how to plan their courses for completing their degree. In addition, course syllabi are available for all courses taught in the web page of the Department. Students are given the opportunity to evaluate the courses they attend, and their input is considered in adjusting course content and delivery aspects.

Graduates of the program obtain the title of Civil Engineer and they can become members of the Technical Chamber of Greece (TEE). Graduates can be employed in both the private and public sector and most of the graduates have been successfully placed in both sectors after their graduation. There is also a large number of graduates who continue with graduate studies and follow an academic career. There are seminars during the seventh semester that identify the concentration areas. Moreover, throughout the academic year, seminars are held with professionals working in the field that provide additional information and exposure to market options and work environment. The Practical Training also provides graduates with an opportunity to explore job prospects, gain valuable work experience and make contacts.

There are 60 faculty members that support the educational and research activities of the program and all have doctoral degrees from institutions abroad and in Greece. An issue of impending concern is the ability to replace those that are going to retire in the near future and ensure continuity of the program. Moreover, there has been a large reduction in faculty members over the last 5 years that the Department has struggled to address, and they are commendable on their efforts to complete their educational goals with these reduced numbers. The Department has a laudable number of publications (approximately 200 in SCOPUS journals for 2018-2019) and a large number of research activities, both in projects and funds, with a good presence and share of programs funded through the European Union (EU). The Department was evaluated in 2013 through an External Evaluation Committee (EEC) and several of the recommendations of the report have been addressed. The Department follows the required procedure for establishing quantitative metrics that define their progress as well as target goals to be achieved in the near future.

For the last five years, the average number of registered undergraduate students is approximately 2,250, while the numbers of Master and Doctoral students are approximately 210 per year each. This generates a ratio of approximately 35 undergraduate and 4 graduate students per faculty. The infrastructure for delivering the program (classrooms, laboratories, libraries, etc.) are adequate and fairly modern.

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 a Quality Assurance Policy for the undergraduate program that is commensurate to the program and includes a commitment that satisfies the requirements and ensures a continuous improvement process. The Department has set up a committee consisting of faculty members that meet periodically to discuss the goals of the quality assurance, identify areas of improvement and establish a set of actions to be undertaken to achieve these goals. The committee follows the overall University guidance for ensuring the quality of the program and works closely with the university representatives to ensure compliance.

There is a culture of continuous improvement of the quality of the program as demonstrated through the various interactions of the EEAP with the faculty, staff, students and graduates of the program. As an example, students are required to complete a course evaluation towards the end of the semester that forms a feedback loop for the faculty to not only address course content and outcome goals but teaching methods as well. Students attested to the fact that their input is taken seriously, and they have confirmed actions taken based on their course evaluations. Students also noted that it is easy to approach faculty with ideas and suggestions for improving course content.

The Department believes that the Quality Assurance Policy guarantees an undergraduate program that balances knowledge and skills and addresses the learning outcomes of the program. In addition, the Department strives to provide a study program that reflects current educational and professional trends, recognizes the need to rebalance faculty lines and areas of interest based on current trends in the profession, promotes incorporation of research advancements in classroom teaching, and aims to develop technically qualified graduates that can be employable. It should be noted though that the continuously reducing number of faculty members and the speed with which they are replaced it may be problematic especially in order to satisfy program needs. The Department is also committed to an annual internal evaluation of the study program to ensure that it reflects current knowledge and market trends. At the same time, a review of the Quality Assurance process is undertaken to ensure compliance with national and university policies.

The Department has reviewed the quality metrics developed by HAHE and the University and has identified those that are reflective of their program to guide their actions and strategic planning. These metrics are compiled annually. The metrics used include values for teaching quality, improved research communication, improved departmental operational procedures, increased interactions with the community, and enhanced promotion of market opportunities to students. Target values have been also established for these indicators based on collective input from faculty to ensure adequate progress and improvement. The values of these goals are reviewed and adjusted accordingly to ensure that the program continuously improves. The goals defined in the Internal Evaluation of the Department are paired with several of the quality metrics that are used and monitored and there is an adequate coverage for tracking progress and achievement of goals. The committee that is set up to ensure the quality of the process and program is also charged with reviewing the progress in achieving the goals of the metrics and monitoring adjustments aiming to address this progress.

The Department communicates the Internal Evaluation and the processes for the Quality Assurance in their web page and is available for all to review.

Panel Judgement

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

Panel Recommendations

It is apparent that the process that has been developed and set up is appropriate for ensuring compliance with the principle. One of the issues that it was raised is the frequency of collecting these values and updating the evaluation process. It seems that the annual evaluation is too frequent, and it may not be as beneficial as it was envisioned. Moreover, the number of indicators used may be too large and further evaluation of their meaning and significance may be required. It may be advisable to not only consider the frequency of the required data collection but also the amount of information collected and analysed in order to develop a more streamlined and meaningful evaluation. Even though the frequency of the review is outside the scope of the Department, the number of indicators could be revisited to identify a smaller number and identify those that are the most meaningful to the Department.

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 has been continuously (three times since the EEC 2013 visit) updating the study program to reflect current trends in the profession and address learning outcomes, required skills and knowledge levels required for the graduates in order to be ready to meet market requirements while considering existing faculty abilities and expertise. As an example, the number of elective courses has been recently evaluated and reduced as a result to reflect current professional needs. The study program also aims to satisfy the vision set forth from the Department, which entails the provision of a quality education offered and the development of social conscience for both faculty and students.

The current study program is based on a successful completion of a set of required courses that address issues relative to the four sectors of the Department, i.e., structural, hydraulics and environmental, geotechnical, and transport and project management. In addition, students are required to complete 13 more courses among a set of elective offerings that are mainly concentrated within one of the sectors, while there is the possibility of selecting courses from other sectors as well. The study program is similar to what other programs offer and provides adequate flexibility to students to customize their studies based on their desires and needs. The study program is structured with an almost uniform semester load of courses throughout the 10 semesters, with the exception of the last when the students will typically work on their Diploma Thesis. The students who participated in the EEAP session attested the overall

appropriateness of the program with regards to the course load and content. The interviewees also noted that there is a continuous discussion of the various aspects for each sector and students are informed about course content and future market opportunities.

The number of elective courses offered is a program aspect that the EEAP and faculty discussed at length, since it seemed to be a fairly long list of options. The Department reached the current study program approach based on an internal evaluation process of the offerings and it has reduced the number based on the available faculty and staff numbers. Students on the contrary noted that they desire the option of having an even larger number of electives and some noted that they simply audit other courses if they can. It should be noted that the courses offered in the first years of the study provide students with an adequate background to be able to function within working environment outside their selected sector if they have to. This was attested by several graduates and employers interviewed.

Students are also encouraged to complete a 2-month Practical Training working either at a public or private entity. This provides them with an opportunity to gain valuable work skills and further understand their future field of employment and market opportunities. The Department promotes this continuously and encourages students to apply for one of the available spots that are determined based on the supply of positions. The Department vets the possible training positions and ensures that the students get a meaningful experience. Some of the employers noted the desire to increase this to a 6-month period in order to provide for a longer, more meaningful experience.

The study program meets the basic knowledge requirements for such a program, and it compares reasonably well with other similar programs in Greece and abroad. The general areas covered in the program are similar to those in other universities and provide an adequate background for graduates that can compete with graduates from other universities. The study program as it currently stands, covers the basic needs required for the students to be capable of being employed once graduated and they have the qualifications to be successful engineers. This was attested through the discussions of the EEAP with recent graduates and employers, who all spoke very positively about their experience in competing to secure a job (graduates) and the qualifications and readiness of the graduates to immediately integrate into the work arena (employers). The employers in particular spoke very highly not only of the technical skills required for successful employment and advancement but also of the excellent preparation of the graduates regarding their ability to understand engineering concepts better than graduates from other universities; a strong testament of the program's strength in addressing this issue.

An area of concern raised from students (both current and graduates) and employers is the lack of systematic development of communication skills (both oral and written) as well as teamwork. Discussions with the faculty identified that there are indeed several courses where projects requiring teamwork are employed, since this is also beneficial for the faculty (i.e., reduced number of faculty having also to grade fewer reports with teamwork assignments). However, this may need to be revisited in order to ensure adequate experience for all graduates in order to provide them a glimpse of real-life working situations, where teamwork is essential and daily activity. A greater effort should be also placed in the development of communication skills across the curriculum. This is an area that merits attention, since it will provide graduate students with the ability to clearly communicate their ideas and enhance their marketability while seeking employment. Along these topics, the need for including a larger number of projects and open-ended assignments in the courses have been raised.

The study program is explained in the Study Guide and provides guidance to students in completing their studies. However, Section 6.7 is fairly confusing (at least to the EEAP) and it will benefit from some review to be similar to the one provided in the online version of the program or even without the specific sector electives in the table. In addition, the course syllabi are available online and students can access them to form an idea regarding their content. Students can also discuss course content with faculty and address any remaining questions that are not clear from the online syllabus; an aspect that was attested through the discussions with students and graduates.

The Department has established a procedure for reviewing the study program annually with input sought from faculty. This process allows for a continuous check of the program to ensure that the learning objectives of the program are met. The faculty expertise and research activities are heavily considered, since they are the persons delivering the required knowledge. The most recent update of the program is a good indicator of such activity aiming to capture recent research trends and market shifts.

Panel Judgement

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

The External Evaluation & Accreditation Panel agrees that this Programme leads to a Level 7 Qualification according to the National & European Qualifications Network (Integrated Master)	YES	NO*
	X	

Panel Recommendations

Overall, the Department has developed an appropriate study program for the student body, and it is reflected in the qualities of its graduates. There are a few aspects that the department may want to consider in the future in order to use resources in a more efficient manner and further improve the quality of its graduates.

The first aspect deals with the number of elective courses. It may be desirable in the near future to revisit this issue to provide fewer elective course offerings. The 2013 External Evaluation had recommended this as well and the Department has already reduced the number of electives. However, the continuously reducing number of faculty and staff may soon not allow the luxury of offering all these electives and the Department can take a proactive approach in identifying the electives that can be eliminated, combined or offered less frequently. The use of current

resources to provide these electives through adjuncts can be helpful but it may also drain the resources of the Department. The option to review the content of some electives and adjust them so they could be covered as cross-referenced and offered courses with other Departments at the University and thus release resources to better address the core courses should be explored. This may be even more critical when considering how to replace future retiring faculty and could be achieved through a strategic planning of addressing current and emerging trends in research and covering these areas of expertise.

The second aspect deals with the need for an increased emphasis in the development of communication skills and teamwork. As it stands now, there is no systematic efforts to increase communication skills in the curriculum and this should be addressed as a continuum throughout the 10 semesters. Teamwork should be also promoted and required for several assignments and projects to cultivate the collaborative, interdisciplinary nature of the civil engineering profession not only among peers but also among other professional fields.

A third aspect is the increase of projects and assignments in the courses to enhance the students' understanding of the topics and provide them with an opportunity to develop critical thinking. This effort will probably require a larger time investment from the faculty and staff, but the use of teams could be a balancing approach.

A fourth aspect is the increase of courses offered in English in order to improve students' familiarity with terminology and at the same time attract international students (e.g., ERASMUS) to the program.

A final aspect is the need of exposure to some basic chemistry issues, since these could be applicable to materials, hydraulics and environmental engineering.

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-cantered approach in terms of teaching is evident: the students are able to choose a path in their studies, focusing on the aspect of the discipline they are most interested in; the mode of delivery depends on the topic and may include lectures, lab sessions, or even electronic delivery. In the interest of inclusivity, the delivery mode and methods may be adjusted in response to identified special needs of some students. Also, the Department appoints a Studies Advisor and an Academic Advisor for students who monitor the students' advancement and ensure timely progress for those who take advising seriously.

Student satisfaction surveys to measure the effectiveness of teaching are conducted at the end of each semester.

Student assessment is carried out according to the program's regulations, which are consistently and fairly applied to all students. Exams are often conducted by more than one examiner, where possible, and the mode of examination can be adapted (e.g., become oral rather than written) in response to any student special needs. Feedback on exams could be provided to those desiring to do so. Assessment methods are published in advance and are available in the course syllabi. Recent exams that were conducted electronically due to COVID have been successful and the Department has tried several approaches to ensure proctoring of the exams and reduction of possibilities to cheat. A commendable practice of the Department is the development of a proctoring approach and plan for exams that the HEHA is promoting as a good practice for other universities.

Student appeals and complaints can be lodged in a number of ways: addressed to the relevant committee, to the Department, verbally or in writing to the Department Chair, or discussed informally with the Academic Adviser. There is also a Student Advocate at the University level, but this position has not been filled yet.

There was some evidence from interviews that the students are seen as active partners. In general, they appeared enthusiastic about the teaching staff, whom they described as very accessible and willing to take on board student suggestions. A pertinent example is the introduction, at the request of the students, of a particular software in one of the courses.

The Department is using the E-learning a telematic application (equivalent to Canvas and Blackboard) that provides all relevant course material. It is an efficient means to inform students of course changes, due dates for exams and assignments and any other course-related information. All courses utilize this platform. This also provides a documented information dissemination and ensures that complaints of lack of access to course-related changes are eliminated, i.e., all are aware of the changes in the course.

Panel Judgement

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

Panel Recommendations

In general, the Department has implemented a student-cantered learning and teaching that is reflected on the course profiles and syllabi and the acceptance from the students. It is unclear how and whether the students are encouraged to develop communication skills and teamwork, and this could be identified in the learning objectives of the courses.

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 in place processes that support the students and their studies.

The smooth transition from high school to the university life is achieved through an orientation process for incoming students that includes suggested course of studies for each of the 10 semesters, course descriptions, listing of opportunities for extra-curriculum activities (e.g., athletics, summer camps) as well as explanation of available social services (e.g., health, food, insurance). In addition, a Student Advisor is assigned to every student, and all relevant material are available online.

The departmental administrative services monitor student progress electronically. For regular students, this task is easily accomplished but for a large group of irregularly or not attending students the concept of monitoring is questionable.

Student's mobility is highly encouraged and there is a plethora of opportunities that the student can take advantage. That includes the ERASMUS program, internships with local industry and public organizations as well as through MOUs with more than 60 universities abroad. In certain cases, students can pursue dual degree with a foreign university through already established agreements.

The ECTS is applied throughout the curriculum although in some cases it underestimates the required effort for the successful completion of the course. This is true for courses with projects which are very time consuming and demanding. A total number of 300 ECTS (level 7) is required for graduation. There are well-defined criteria for the completion of the Thesis involving clarity and structure of the thesis, presentation and communication skills. Practical training is also part of the degree and is offered as an elective course. The Department has developed a very supportive network of various industry, social and cultural entities to provide students with available options. The practical training is very important for the development of real-life professional and social skills that enhances the employability of the graduates. After the successful completion of all the degree requirements a Diploma Supplement is automatically

issued to all graduates. This document explains the qualification gained, including achieved learning outcomes and the context, level, and status of the studies pursued and successfully completed.

Panel Judgement

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

Panel Recommendations

The EEAP concluded that Department delivers all of the individual aspects for ensuring student admission and completion of studies in a very satisfactorily and professional manner. The only concern is on the monitoring of the students' progress, which seems to be accomplished in a very passive fashion without having any measures and/or guidance in place to prevent failures and stagnation. The inconsistencies between ECTS and workload should be revisited, even though this has been partially addressed based on the recommendations of the 2013 evaluation, to better reflect the amount of work effort for credits earned in a more equitable manner.

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

There are 60 full time faculty members drawn from a wide range of academic and professional backgrounds with expertise and research activity which reflects the multidisciplinary character of the Department. In addition, there are 31 staff members who are facilitating the teaching and laboratory activities of the Department. There are also adjunct staff on temporary contracts. All faculty and staff members are actively involved in research that supports and complements the delivery of the study program and teaching of the courses. The Department also encourages faculty to relate and translate their research activities into their courses. The publication track record of the faculty and staff is excellent and confirms the strong research profile and activities of the Department.

The recruitment processes followed are those dictated by law: they are clear, transparent and fair, and result in the recruitment of properly qualified staff. The Department aims to recruit in areas considered of strategic importance, also taking into account synergies with existing academic staff and core teaching needs. Policies to attract highly qualified staff include invitations for guest lectures and the facilitation of incoming sabbaticals for research collaboration.

Innovation in teaching is encouraged by promoting the use of e-learning platforms, laboratory-based exercises, as well as online forms for receiving feedback from students. There are also teaching excellence awards for Assistant Professors and they have been in place since 2017.

Due to the departure of a significant number of academic staff in recent years, teaching loads are high. The Department also relies on temporary lecturers drafted annually under various schemes to fulfil the required programmatic needs and deliver the courses planned.

The Department's academic staff are very research active, having published 80-100 peer reviewed journal papers per year in the previous 4 years. Links between research and education exist via the diploma thesis and, where feasible, via arranging for academic staff to teach topics within their research interests. (E.g., as is done in Surface Foundations by a team of academic staff.)

Opportunities for professional development are offered through funding for conference attendance, and mobility for teaching or research on the basis of existing university-level bilateral agreements (e.g., ERASMUS). Requests for professional development by means of sabbatical leave are generally granted to academic staff, especially those wishing to work abroad to develop research links and advance their knowledge.

Academic staff members are subject to the quality assurance processes of MODIP, including the assessment of their teaching by students at the end of each semester, and self-assessment of their teaching. The EEAP was informed during the discussions with current students of the program of instances where their evaluations resulted in course content changes. This provided a positive feedback for the students indicating their opinion is well regarded and actions are taken based on their input.

Panel Judgement

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

Panel Recommendations

The Department has an excellent faculty and staff body with a strong research track record and adequate mobility opportunities. The Department should continue to actively pursue the replacement of faculty retirements to ensure the continuity of the program delivery at the high standards that they have been performing thus far. This would also reduce the reliance on temporary adjunct staff. The EEAP suggests an increase in professional development opportunities aimed specifically at junior, recently recruited staff. These could include, but not limited to, mentoring by senior colleagues, seminars on lecture delivery, exam content development, and other teaching skills, supervising students, etc. The Department should continue to evaluate new hires through its strategic plan to address research priorities and focus areas for the future so it will be well-positioned to address upcoming changes in the profession.

Finally, there is a need for a quicker process to hire new faculty since the time gap could create problems with course offerings and the study program overall.

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 relevant information was assembled through various documents, a pre-recorded video presentation and live discussion with staff and students since a site visit was not possible. The space of the Department appears to be well organized and adequate for their requirements of teaching, research and administration.

The Department is very well endowed with all of the necessary facilities and learning resources to deliver a world class educational and research program. There are dedicated classrooms, well-equipped laboratories for all of the specialty study areas (structural/materials, hydraulics, environmental, geotechnical/soils, transportation and surveying), supported by an extensive IT system. There is enough technical support for the operation and maintenance of the laboratories. There are two computing centres each with 30 seats that are well equipped with personal computers and all required software to support teaching activities and are open long hours (9-5 currently which is reduced due to funding issues). It should be noted that the exams during the COVID period were conducted at these facilities. Also, in addition to the main campus library, the Department maintains its own library. The library collections are converted over time to electronic formats for journals and there is space for students to study and work. The library provides access to various electronic subscriptions of journals and books as well as paper copies of books.

The distribution of the existing facilities has been inherited from better financial times. Therefore, there is duplication and probably over specialization in their designated usage. There is collaboration among the various labs, and they work together to seek funds. A commendable practice is the services offered to external stakeholders both private and public

through facilitation of the use of the laboratory facilities, which also provides funding for equipment and their maintenance.

Students at AUTH enjoy a lot of services including the University Student Club where meals are served, low-cost housing accommodations, student health and insurance services, and services for students with special needs. Also, there is office for career services, scholarships, foreign language teaching, gym, summer camp, day care unit and religious accommodations. Students are informed for those support services that are functional and easily accessible; inquiries from interested students can be made electronically or by phone. There is university-wide sufficient and competent staff members and infrastructure to properly manage, maintain and run the support services.

The Department has implemented the E-learning platform for all its courses which allows faculty to communicate in a timely manner and efficiently with all students registered for the course. Information about assignments, lecture-related material, course schedule, and other course-related elements are posted and create a document track record of activities and information disseminated.

Panel Judgement

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

Panel Recommendations

The EEAP was satisfied from the existing facilities and their quality. Students in the Department are provided with an excellent spectrum of educational, social and recreational services. An aspect that merits attention is the possible optimization and restructuring, for cost savings and better resource allocation, of lab facilities through collaboration and/or sharing with other academic units and within the Department. It should be noted though that required maintenance and upkeep is essential for the continued progress and support of the students.

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 has an advanced, diverse and flexible system of information management, that has been even more expanded in the COVID time. E-Learning is widely offered and gladly accepted by the students. Modern and efficient platforms are used that enable the lecturers to have a close contact to their audiences. Furthermore, refined systems are utilized to administer and proctor examinations and also to conduct and evaluate surveys of student satisfaction and course evaluations. The students have electronic access to learning resources and their grades, and they can also submit applications electronically. The support of these computer applications seems to work efficiently while maintaining the privacy of personal data. The Department management team exploits the benefits of a highly advanced information system for administration purposes. All documents are moved and certified electronically, and the several statistical surveys are automatically updated. EEAP has the impression that bureaucratic procedures are kept to a minimum thanks to the obviously excellent information management.

Panel Judgement

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

Panel Recommendations

There are no recommendations for this principle, since the Department performs well and has established the appropriate procedures to collect the required data for their evaluations.

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 main portal for information nowadays for any entity is a webpage and the Department publishes and circulate relevant information in their webpages at the Aristotle University of Thessaloniki site. There is adequate and helpful information for prospective and current students. The structure of the webpage is clear and easy to navigate. There is clear information on the structure of all the available programs from undergraduate to PhD level. The course content is presented very efficiently and effectively and is considered an excellent approach. It should be noted that they are presented both in Greek and English.

A separate area presents the extensive research activities and the faculty publications. The CVs of teaching, research, technical and administrative staff are provided as well although the description of the role and CV for some of the members needs updating. The information relative to each faculty and staff member is not easily followed and the "button" that sends an interested person to the faculty information is not clear, e.g., the word "Connect" does not lend itself to the detailed CV information.

With its many activities, the Department has a high degree of awareness in the Greek society, especially in northern Greece. Moreover, it is linked to many research institutions abroad with a wide program of cooperation efforts and exchanges. The EEAP was especially impressed by the commitment of students to organize information meetings for particular problems of actual interest, e.g., earthquakes.

The visibility of the excellent performance of the Department in the relevant webpage is good but it could be improved. Browsing further into the "Research Projects" tab, the user encounters merely a collection of icons and uncommented links, e.g., "accu waves" or "InnovaSUMP", that are not very informative. The contents of these links are, admittedly, very interesting and informative, but the access to them is not obvious. OMEA had provided to EEAP several pdf files, among them the lengthy file B10.10, which contains all pertinent information but is difficult to wade through and obtain an easy overview.

Panel Judgement

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

Panel Recommendations

The webpage of the Department is well organized, and it provides the appropriate information to the public and students. The EEAP though recommends a thorough review both of the content and language of the various webpages to ensure that those seeking information could reach them easily. Short descriptions for each research effort would be beneficial and informative in order to entice information-seekers and provide them with relevant information. The EEAP also recommends a more frequent update of the faculty CVs to reflect their current activities.

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 has in place a process that regularly evaluates and revises the study program to be up to date with current research. The review/revision is achieved through two main levels: firstly, at the teaching group level, which is responsible for incorporating the latest research outcomes in the course's content, and secondly, at the institutional level, through the Committee for the Study Program, which reviews the content of the entire program and suggests changes. The students participate in these discussions through their representatives. However, other stakeholders do not participate officially in this procedure. The program has undergone three revisions according to OMEA since the 2013 External Evaluation, which, among other changes, included the introduction of new disciplines, in order to address the needs of the society, such as the course Natural Hazards-Analysis and Management of Risks. Additionally, the diploma theses deal with interesting and contemporary subjects, and are of high quality, as stated by the representative of the TEE during the meeting with employers and social partners.

In addition, OMEA prepares a self-assessment report at the end of every academic year summarizing the Department's educational and research activities, the facilities and the supporting services, as well as the evolution of staff and students. The internal evaluation report is prepared electronically in the webpage of MODIP and makes use of the databases connected to the platform.

Electronic questionnaires are used to evaluate the courses and the teaching staff at the end of each semester that address multiple aspects of the teaching procedure. The participation rate has been low, but it increased significantly in the previous academic year when the reviews were conducted during the teaching periods. OMEA summarizes the results of the evaluation and

they are discussed in a faculty meeting and posted in the Department's website. In addition, the teaching faculty also voluntarily assess their performance, as well as the department's facilities using the MODIP platform.

The students' grade is calculated including all educational activities within the courses. The calculation is presented in the course syllabus and its procedure is presented in advance. Students' progression is monitored through the teaching groups and the OMEA committee. The EEAP and the Department are concerned for the large number of students that do not complete their studies within n+2 years. The Department has decided to monitor the numbers of these students and convert it in an indicator for observing the progress as part of their strategic goals. Overall, the students considered the workload normal to intensive. The members of the teaching staff develop and proctor exams and provide a fair assessment.

The learning environment is suitable, and the support services are very sufficient, especially regarding the electronic administration management. In general, the students expressed a very positive opinion for their educational experience, and they are satisfied with the services offered by the university and the department. The relations between students and faculty are good with mutual respect.

Panel Judgement

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

Panel Recommendations

The Department is appropriately engaged in an evaluation process of their program and activities. Overall, the Department's scope is achieved as the learning outcomes address the professional rights of civil engineers. The EEAP believes that the evaluation process could be enhanced utilizing the following suggestions.

First, it would be beneficial to the Department to also engage and seek the input of employers, professional associations and graduates in the study program revisions to ensure an updated view of the profession and develop graduates that are better prepared to enter the workforce. Another idea is to establish an External Industry Advisory Board that would work with the Department to provide feedback on educational and market aspects.

Second, it would be valuable to develop a survey of graduating students and graduates to obtain a program evaluation and identify potential areas of improvement. This would provide an opportunity to students to reflect on their knowledge gained and identify potential areas of changes.

Third, the internal evaluation procedure should be simplified in order to be more efficient and meaningful. The EEAP noted that the Department ensures the timely collection of all data, but the amount of such data creates an unreasonable and unnecessary burden of the teaching staff. Too much information is often no information and streamlining the process would provide meaningful areas for improvement.

Principle 10: Regular External Evaluation of Undergraduate Programmes

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

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HAHE 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

The Department has undergone an external evaluation in 2013, which involved the evaluation of the undergraduate and the integrated master programs, teaching activities, research, facilities, services, strategic planning, etc. The External Evaluation report had developed a set of recommendations and the Department has made significant progress to address most of them. Approximately 75% of the 2013 report recommendations have been implemented including educational objectives, course offerings, course syllabi, realignment of diploma thesis, and course evaluation procedures. Even though the number of offered courses has been reduced, it is still high and particularly considering the elective courses.

The Department implements the procedures set forth by the AUTH MODIP, collects and analyses the required data periodically, and provides their results to the MODIP.

All faculty and staff recognize the importance of the external evaluation and value the past and future recommendations. They all believe this helps the Department achieve its goals and purpose and it also helps them improve along the way.

Panel Judgement

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

Panel Recommendations

There are no recommendations for this principle, since it is apparent that the Department values the significance and recommendations of such external evaluations and they seem willing to undertake any recommendations made.

PART C: CONCLUSIONS

I. Features of Good Practice

The Department has demonstrated a series of good practices during the onsite visit and documents provided. These practices include:

- A study program that has been thoughtfully designed while providing a large gamut of options to students through the four specialization sectors within civil engineering
- A study program that promotes critical thinking in civil engineering resulting in extremely well-qualified graduates that industry and academia both nationally and internationally seek out for hiring
- A study program that commands prominence in the field of civil engineering not only nationally but internationally
- A faculty body that is dedicated to the teaching values and duties and take immense pride in their efforts to educate students and provide them with a first-class education despite their continuously reducing numbers
- A faculty body that is exemplary trained with significant research presence locally, nationally and internationally and high levels of productivity
- An infrastructure appropriate and adequate to provide the required teaching and research activities and support student activities
- A study program that undergoes continued evaluation and update to include current research findings and address community and societal needs
- A faculty culture of continuous evaluation and improvement based on efforts observed during the onsite visit and prior evaluation documents, and
- A faculty body that works very closely with local and regional authorities and entities on various aspects of civil engineering and provides guidance and consultations through its laboratories and expertise.

II. Areas of Weakness

The Department is also facing a number of issues that do not allow it to fully reach its capabilities. These areas include:

- Anticipated retirements in the next few years that could reduce the faculty to 49 members with a slow replacement timeframe
- A program study that is designed and customized around the existing expertise of the faculty.

III. Recommendations for Follow-up Actions

The EEAP is very pleased with the overall performance of the Department and the qualifications of its faculty and staff to complete the required educational goals and research activities. The following recommendations could simply serve as the long-range goals of the Department while establishing their strategic plan and are suggested with the intention of advancing the current placement of the Department and increasing its prominence both nationally and internationally.

The EEAP proposes the following recommendations as follow-up actions for the Department:

- Evaluate the number of electives offered to address reduced faculty and staff numbers and consider offering them less frequently while considering exposure to some basic chemistry issues
- Increase emphasis in the development of communication skills and teamwork throughout the curriculum and increase course offerings in English
- Increase number of projects and design assignments in the courses to enhance the students' understanding of the topics
- Review and revise accordingly the number of ECTS for courses to properly reflect workload
- Increase professional development opportunities aimed specifically at junior, recently recruited staff
- Continue to pursue new hires based on the strategic plan to address research priorities and focus areas for the future
- Evaluate lab needs and seek possible cooperative options within the Department and other Departments
- Review both of the content and language of the various webpages to ensure brevity and ease of access to pertinent information
- Encourage faculty to update their CVs
- Seek input from external stakeholders during the study program revisions and updates through the development of an External Industry Advisory Board
- Develop an exit survey for graduating students and graduates, and
- Streamline the internal evaluation to reduce unnecessary workload for faculty

IV. Summary & Overall Assessment

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

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

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

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

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

The External Evaluation & Accreditation Panel agrees that this Programme leads to a Level 7 Qualification according to the National & European Qualifications Network (Integrated Master)	YES	NO
	X	

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

- 1. Professor Nikiforos Stamatiadis (Chair)**
University of Kentucky, USA
- 2. Professor Emeritus Dimitrios Kolymbas**
Universität Innsbruck, Austria
- 3. Professor Panagiotis Scarlatos**
Florida Atlantic University, USA
- 4. Associate Professor Antonis Zervos**
University of Southampton, United Kingdom
- 5. Parisi Mpillias**
Technical Chamber of Greece, Greece