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ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ  
ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC  
HQA  
HELLENIC QUALITY ASSURANCE  
AND ACCREDITATION AGENCY

# Accreditation Report for the Undergraduate Study Programme of:

Environment

Institution: University of the Aegean

Date: 03/11/2019

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Ευρωπαϊκή Ένωση  
Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης

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



Report of the Panel appointed by the HQA to undertake the review of the Undergraduate Study Programme of **Environment** of the **University of the Aegean** 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 **Environment** of the **University of the Aegean** comprised the following five (5) members, drawn from the HQA Register, in accordance with the Law 4009/2011:

1. **Prof. Thomas PANAGOPOULOS** (Chair)  
University of Algarve, Faro, Portugal
  
2. **Prof. Irene KOKKALA**  
University of North Georgia, Georgia, USA
  
3. **Prof. Spyros SFENTHOURAKIS**  
University of Cyprus, Nicosia, Cyprus
  
4. **Prof. Filippos TSIKALAS**  
University of Oslo, Oslo, Norway
  
5. **Assoc. Prof. Elena XOPLAKI**  
Justus-Liebig-University Giessen, Giessen, Germany

## II. Review Procedure and Documentation

The Accreditation Panel (AP) convened on Tuesday 29<sup>th</sup> October 2019 at the “Divani Palace Acropolis Hotel” in Athens. The AP was briefed by the Hellenic Assurance and Accreditation Agency (HQA) on the Quality Assurance Standards for Quality Accreditation of Undergraduate Programmes and Accreditation Guidelines. During the briefing, the panel received the final timetable for the site visit at the Department of Environment (DoE) of the University of the Aegean (UOTA). At an earlier stage, the AP received relevant material for the department. Moreover, the AP was provided, among other material, the study programme Proposal for Accreditation, information on the quality indicators for the years 2015-2016, 2016-2017 and 2017-2018 as well as the DoE External Evaluation Report of 2012. Subsequently, the AP met and discussed the strategy and issues to be considered during the site visit. In the afternoon of the same day, the AP flew to the Island of Lesbos.

On Wednesday 30<sup>th</sup> October 2019, the AP initially met with the University Vice Rector and the Department Head. The Vice Rector also serves as the President of the Quality Assurance Unit (MODIP). The AP was briefed on the history and academic profile of the UOTA and DoE. Later, the Internal Evaluation Group (OMEA) together with representatives of MODIP joined the meeting, and the Head of the Department presented the department’s current status, strengths and areas for improvement. The AP had an extensive meeting with the OMEA/MODIP representatives and discussed the compliance of the Environment undergraduate programme to the “Standards for Quality Accreditation for Undergraduate Programmes” that are set by HQA. Later on, the AP met teaching staff members and discussed the undergraduate study program, the professional development opportunities, the mobility, faculty workload and the evaluation of teaching staff by the department students. Following that, intensive meetings through physical presence and videoconference participation took place with undergraduate and graduate students, graduates/alumni and their association, PhD candidates and finally with several external stakeholders from relevant private and public sectors. At the end of the day, the AP met and had a short internal debriefing meeting to reflect on the impressions of the first day and prepare for the second day of the site visit.

During Thursday 31<sup>th</sup> October 2019, the AP visited the DoE premises and facilities. The AP toured research and teaching laboratories (biology, chemistry, soil sciences, waste management, air and water quality, biodiversity), equipment storage facilities, computer rooms, classrooms and one lecture hall. During the premises visit, the AP discussed with the undergraduate students that were attending the Meteorology-Climatology lecture (random selection) in order to receive a broader feedback on the undergraduate programme and potential improvements. Later on, the AP had a short debriefing meeting in order to discuss the site visit outcomes and prepare the oral report of the closing site visit meeting. Subsequently, the final meeting was held among the AP, Vice Rector, Head of the Department, OMEA and MODIP. At the end of the meeting, the Rector of the University also joined. During the afternoon, the AP flew back to Athens.

From Friday 1<sup>st</sup> to Sunday 3<sup>rd</sup> November 2019, the AP worked on the Accreditation Report.

### III. Study Programme Profile

The DoE at UOTA is a dynamic department with more than 30-year history in environmental studies. Currently, the department consists of seven (7) Professors, five (5) Associate Professors, eight (8) Assistant Professors, seven (7) Specialised Teaching Staff (EDIP), two (2) Specialised Technical Staff, three (3) teaching fellows, and two (2) Administration Staff members.

The DoE consists of three (3) Sectors/Divisions:

1. Ecosystem Management
2. Social and Humanistic Environmental Sciences
3. Environmental Engineering and Science

The DoE is divided into the following nine (9) Research Laboratories:

- i. Research Centre of Environmental Communication and Education
- ii. Waste Management Laboratory
- iii. Biodiversity Conservation Laboratory
- iv. Energy Management Laboratory
- v. Laboratory for Environmental Policy & Strategic Environmental Management
- vi. Remote Sensing Laboratory
- vii. Regional and Insular Development Laboratory
- viii. Water and Air Quality Laboratory
- ix. Laboratory of Applied Economics of the Environment

The number of the annually new admitted students determined by the State of Greece is around 100 (2019-2020 data). However, the current total undergraduate student population amounts 759 persons, since a significant number of students fails to complete their studies within the normal 4-year cycle. The student population graduates within approximately 6 years.

OMEA data (2017-2018) show the enrolled students and graduating students distributed as follows: 0% graduated in 4 years, 37.2% in 5 years, 30.2% in 6 years, and 32.5% in 6+ years. During the department's life, the total number of graduates is as follows: 1162 BSc graduates, 832 MSc graduates, and 135 PhD.

The DoE offers a BSc with a 4-year cycle (8 semesters) at the undergraduate level. The DoE is the first department in Greece that offered a BSc degree in Environmental Sciences starting back in 1987. According to the 2019-2020 Student Handbook, the completion of the undergraduate programme requires 240 ECTS. These derive from 25 compulsory (mandatory) courses that provide 122 ECTS, a mandatory undergraduate thesis (Πτυχιακή Εργασία) with 10 ECTS, and 108 ECTS from a pool of 45 elective (optional) courses. A 2-month internship/practical training (Θερινή Πρακτική Άσκηση) is optional and encouraged. The programme of studies is adjusted to the students' needs on an annual basis and is substantially reformed every 3-5 years. The last update took place in 2016.

## 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 UOTA has established an appropriate Quality Assurance Unit (MODIP) clearly defining review processes, the programme's continuous improvement, and Key Performance Indicators. The MODIP continuously monitors and enforces the Quality Assurance Policy that is applied and guaranteed by a committee of five (5) DoE members (OMEA). The DoE has set specific, measurable and timely goals for its undergraduate study programme. The OMEA is in line with MODIP for the improvement of the study programme. Relevant information is shared with involved parties and posted to the UOTA/MODIP intranet and the DoE website.

The AP found an established and well-structured quality assurance policy by the academic unit. The academic unit has issued a statement demonstrating its commitment to the implementation of a quality policy that promotes the academic profile and orientation of the DoE undergraduate programme, its purpose and its field of study. The quality policy statement aims to realise the strategic objectives of the programme strategic goals and defines the ways and means of achieving them.

### Panel judgement

<b>Principle 1: Institution policy for Quality Assurance</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### Panel Recommendations

1. The AP acknowledges the quality assurance procedures by DoE and recommends that students continue to actively participate in OMEA.

## 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 DoE undergraduate programme was the first to be offered in Environmental Sciences in Greece and the first of UOTA, which began in 1987. The DoE undergraduate programme includes a wide range of study areas (courses) aligned with curricula of similar, international study programmes. According to the departmental documentation and the academic staff presentations (OMEA), the design of the DoE undergraduate programme follows, in a large degree, the trends on high-quality European and international programmes and universities. Links between research and teaching in the undergraduate programme are established through the offered elective courses and the undergraduate thesis. The number of published undergraduate theses in peer-reviewed journals is significant. The DoE undergraduate study programme curriculum is well articulated and comprehensive. Moreover, the anticipated student workload is fully compliant with the European Credit Transfer and Accumulation System (ECTS).

The SWOT analysis carried out by the DoE dates from 2012 and should be updated in order to reflect the current status of the department with regard to the planned revision of the undergraduate programme.

Students have expressed the need and desire for additional fieldwork and laboratory training. The number of students admitted annually is about 100, but the number of active

students is moderate. Therefore, there is the possibility capacity to increase laboratory and fieldwork training.

The compulsory undergraduate/bachelor thesis is an important part of the programme and is extended to two semesters by most students, so the current credit weight of 10 ECTS is an underestimation of the amount of work involved in the thesis completion.

The AP notices that the potential of coordination with other relevant departments in offered common courses has not been adequately exploited, so far.

The procedure for the study programme revision is in place and guarantees the periodic internal review. The programme is refined annually and substantially revised every 3-5 years (last update in 2016). The procedure foresees consultation with stakeholders, external experts, students and graduates; however, this is not yet fully optimised. The AP acknowledges the newly established (summer 2019) advisory panel comprised of alumni and external stakeholders.

The DoE undergraduate programme leads to adequate professional rights for DoE graduates in teaching in the secondary education system of Greece. In addition, stakeholders expressed their positive view of the programmes' graduates knowledge and abilities.

### Panel judgement

<b>Principle 2: Design and Approval of Programmes</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

### Panel Recommendations

1. Update the 2012 SWOT analysis in preparation for the planned revision of the undergraduate programme.
2. Additional fieldwork and laboratory training should be considered in the next study programme revision.
3. The DoE should balance the actual workload of the compulsory undergraduate thesis with the corresponding ECTS.
4. The DoE should strengthen its efforts in didactic coordination and collaboration towards common courses with relevant departments, such as the Department of Marine Sciences and the Department of Geography, among others.
5. The stakeholders and external experts of public and private sectors should be consulted consistently and formally for all revisions and planning of the study programme in the future.

### 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

The DoE undergraduate programme is organised in a positive student-centred learning environment that offers flexible learning paths and mutual respect. An attempt is made to include different types of delivery that can improve the attendance levels. The DoE has already introduced a mandatory attendance policy in several courses and consideration should be given to increasing the number of courses with the same policy.

For most lecture courses, the overall grade is assessed using multiple examination measurements. The syllabi (course frameworks) describe the contents as well as the assessment criteria methods.

The AP noted the low participation of students in the course evaluations although the department has made efforts (e.g., visual display running video at the entrance of the department’s building). Students claim that they do not participate to the course evaluation, as they believe that their opinion is not evident in the planning and reform procedures of courses. In addition, the students claim that the questionnaires were lengthy and unclear but the AP notes that the OMEA/MODIP have already reviewed and improved the questionnaires.

Students are not fully aware of the actual role and the services an Academic Advisor can provide towards their success.

### Panel judgement

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

### Panel Recommendations

1. The DoE should make further efforts to increase the participation of students and their confidence in the course evaluations, for example:
  - a. During class hours or at the beginning of an exam, the instructor should further emphasize the importance of participation in the evaluation process.
  - b. Other possible innovative ways (e.g. mobile phone app) should be adopted.
  - c. The DoE/UOTA should also consult other universities for effective employed ways.
2. An attempt should be made to increase the number of courses with a compulsory attendance policy in order to assess its feasibility.
3. The role and duties of the Academic Advisor should be further promoted to the students and adapted to the specific needs of the department. A formal assessment of Academic Advisors by students should be considered.
4. All courses should be assessed by multiple methods.
5. Different modes of delivery should be included in all courses, for example learning communities (group work), writing intensive courses (include extensive literature review reports), and project-based learning exercises.

## 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

Undergraduate students are admitted via national admission examinations. The DoE has no control over the number and background education of the admitted undergraduate students. About 100 students are admitted annually, however, the size of the active students population is moderately small.

The incoming students are welcomed and guided to the DoE premises, activities, and study programme. The students' progression is properly monitored. Mobility rates provide evidence of the students active encouragement to visit other academic and research institutions within the ECTS framework. Students have requested to be credited access to the Erasmus programme from the second year of their studies.

Both students and the DoE consider the compulsory undergraduate thesis of great value and the quality requirements are clearly stated. The AP considers that a proper Thesis Handbook is useful to the students. A 2-month elective/optional summer practical training is in place, based on a developed interdisciplinary network, and is considered by the AP as a valuable part of the programme in terms of developing both job-specific and broader skills. Students value the practical training as a first step towards the undergraduate thesis and/or the job market. The AP notes that the participation of students in the practical training is significant. The DoE should sustain the larger number of such opportunities, and the Greek State should increase both the funded opportunities and the amount of compensation.

### Panel judgement

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

### Panel Recommendations

1. The DoE should make further efforts to increase the participation of students in mobility programmes through enlargement of their Erasmus+ network.
2. The Greek State should increase both the funded opportunities of the elective/optional practical training and the amount of compensation.

## 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 DoE teaching staff should make greater use of the existing professional development opportunities. Specialised pedagogic training is required to establish innovative teaching methods, widen their implementation and thus increase attendance of students. In this framework, dedicated pedagogic training to the teaching staff to support as well disabled students should be promoted.

Students are largely satisfied with the academic staff teaching competence, open-mindedness, mentorship capabilities, cooperation and social interactions. Consideration should be given to introduce annual teaching awards for excellence.

Established links between research and teaching in the undergraduate programme are evident. In this context, the DoE study programme is enriched by state-of-the-art research outcomes carried out by the academic staff of the department. This is apparent from the undergraduate thesis topics that are linked to research projects as well as the up-to-date subjects of the offered elective courses.

The DoE has established structures for academic staff collaboration with other universities, research laboratories and the industry. This very good practice should be promoted further.

The AP finds that the DoE should have more flexibility in hiring temporary teaching personnel suitable for specialised courses.

### Panel judgement

<b>Principle 5: Teaching Staff</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### Panel Recommendations

1. The AP recommends that the UOTA should provide specialised seminars or courses on academic pedagogics, meeting also the needs of disabled students.
2. Undergraduate courses could be also enriched by external/guest lecturers that can cover specialised scientific subjects, thereby improving the quality of the study program. The Greek State should increase funding to attract and support external/guest lecturers.
3. The DoE should have more flexibility in hiring temporary teaching personnel suitable for specialised courses.
4. Consideration should be given to introduce annual teaching awards for excellence.

## 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 DoE has the necessary facilities (classrooms, laboratories, IT infrastructure). The DoE buildings provide a good working environment kept in satisfactory condition. A part of the laboratory equipment and spaces are aged and should be updated/renewed/enhanced/improved as appropriate. The laboratories are well organized and meet international safety standards, however, limited training on first aid is provided to the laboratory staff. The AP noticed that the DoE has a very good IT infrastructure and designated computational facilities with personal computers available to the students.

The AP saw the lack of emergency response procedures/training and emergency drill for the DoE building, a responsibility that falls not only at the departmental but also at the university level.

The central UTOA library is located in the centre of the city and far from the campus. A dedicated reading room is needed for student use.

A wide range of support services is currently available to the students; however, there is an urgent need for additional housing, considering the present conditions on the island of Lesvos. Students have expressed the need for more frequent public transportation during rush hours.

### Panel judgement

<b>Principle 6: Learning Resources and Student Support</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

### Panel Recommendations

1. The AP emphasizes the need for additional fieldwork, and the need for updating the aged teaching laboratory equipment and spaces.
2. First aid training should be provided to all DoE staff.
3. The DoE and UOTA should implement an emergency response procedure and frequent emergency drills.
4. A reading room for students should be created within the larger premises of the DoE.
5. There is an urgent need for additional housing.

## 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 UOTA has established and the DoE operates the information system for the collection and management of data concerning the student body and its progression, teaching staff information and research projects. Nevertheless, the regulatory requirements for personal data protection policy have not been implemented fully yet. This is already acknowledged by the UOTA and actions are underway.

The AP witnessed the use of collected information and their proper use and presentation to allow relevant interpretations and comparisons. The DoE is highly acknowledged for the continuous efforts in this aspect.

The AP found that student participation in course evaluations is low.

The DoE monitors sufficiently the career paths of the graduates.

## Panel judgement

<b>Principle 7: Information Management</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

## Panel Recommendations

1. The UOTA/DoE should fully comply with the regulatory requirements for personal data protection policy.
2. The DoE should investigate and test alternative ways to increase participation of students in the course 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 DoE website provides the necessary information regarding the academic unit and the study programme. The published information is up-to-date. The DoE website also delivers relevant information with environmental social and economic impact addressing local stakeholders and the general public.

The AP noticed also an insufficient outreach effort targeting the local community.

### Panel judgement

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

### Panel Recommendations

1. The DoE should increase outreach, for example:
  - a. Organise an open-day for schools.
  - b. Strategically planned professional orientation visits to High Schools all over Greece.
  - c. Establish an exhibit room/area within the DoE premises where informative public displays relevant to the DoE research activities can be presented.

## 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 DoE in collaboration with OMEA/MODIP has established the annual self-assessment procedure of the study programme in accordance with the Quality Assurance Requirements. The findings are shared within the academic unit leading to the implementation of agreed actions. The AP noted that students participation and involvement of external stakeholders in the undergraduate study programme revisions should be enhanced further.

The undergraduate programme was enhanced recently through the addition of courses on "Entrepreneurship" and "Biotechnology" which increased collaboration with external stakeholders. The AP recommends a better integration of Environmental Ethics and Environmental Law with specific focus on the deeper understanding of the legal framework in the study programme. In addition, "Circular Economy" concepts should be integrated within existing courses (e.g. "Economy and Environment II") of the study programme. Furthermore, the course "Spatial Environmental Planning I" should go deeper to the concept of regenerative sustainability.

## Panel judgement

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

## Panel Recommendations

1. The students' participation and the involvement of external stakeholders in the undergraduate study programme revisions should be enhanced further.
2. Integrate Environmental Ethics and Environmental Law with specific focus on the deeper understanding of the legal framework in the study programme. Other courses should be updated and enhanced, e.g. "Circular Economy" concepts should be integrated within existing courses (e.g. "Economy and Environment II") and "Spatial Environmental Planning I" should go deeper to the concept of regenerative sustainability.
3. Reinforce the established outreach plan towards the student body and the scientific community with educational projects on climate change impacts, adaptation and mitigation, at the European and global levels for higher department visibility and student attraction.

## Principle 10: Regular External Evaluation of Undergraduate Programmes

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

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

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

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

### Study Programme compliance

In 2012, an External Evaluation Committee was appointed by HQA and evaluated the DoE. The DoE has seriously considered the proposed recommendations and followed up with a set of responses. However, the AP finds that the provided information lacks extensive detail. Also, several recommendations received incomplete responses. Implementation grades along with a detailed action plan are missing. At least one recommendation (#15) was misinterpreted.

### Panel judgement

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

### Panel Recommendations

1. The AP recommends that the DoE should ensure that the relevant and still valid recommendations of the 2012 External Evaluation Committee report will be implemented.
2. A detailed action plan and implementation grade to any recommendations should be provided for any future accreditation/evaluation.

## **PART C: CONCLUSIONS**

### **I. Features of Good Practice**

- The DoE was the first department in Greece that offered a BSc degree in Environmental Sciences starting back in 1987, and has set the standards for similar departments in the country.
- The quality assurance procedures by DoE include active student participation and involvement in OMEA.
- The undergraduate programme includes a wide range of areas of studies (courses) aligned with curricula of similar international study programmes.
- The fact that some undergraduate theses were published in peer-reviewed journals is worth of merit.
- An excellent and supportive relationship among students, academic and administrative staff is evident.
- The DoE premises provide a good working environment with adequate space kept in satisfactory conditions.
- The DoE attracts a significant amount of external research funds.
- The DoE maintains an extensive network of public and private sector stakeholders including the newly established (summer 2019) advisory panel comprised of alumni and external stakeholders.
- The fruitful collaboration with external stakeholders was enhanced recently through the addition of courses on “Entrepreneurship” and “Biotechnology”.
- The DoE website is well structured, user friendly and provides the necessary information regarding the academic unit and the study programme with up-to-date information.
- The use of multi-media (e.g. visual display running video at the entrance of the DoE building) to increase student awareness.
- The participation of students in the 2-month summer practical training is significant.
- The DoE monitors sufficiently the career paths of the graduates.

### **II. Areas of Weakness**

- A part of the laboratory equipment and spaces are aged.
- Relatively low student attendance in theoretical courses and participation in course evaluations and surveys.
- Lack of staff first aid training and emergency response procedures/training/drill.
- Lack of full compliance to the regulatory requirements for personal data protection policy.
- The department is affected by shortage of student housing due to the current conditions on the island.

### III. Recommendations for Follow-up Actions

#### Addressed to DoE

- Continue the good practice of student participation and involvement in OMEA.
- The next study programme revision should consider:
  - Increasing fieldwork and laboratory training;
  - Balancing the workload of the undergraduate thesis with the corresponding ECTS;
  - Common courses with relevant departments;
  - Involvement of external/guest lecturers on specialized scientific subjects;
  - A deeper integration of Environmental Ethics, Environmental Law, Circular Economy, and regenerative sustainability;
  - Strengthening the consultation with stakeholders and external experts of public and private sectors.
- Promote further the role and duties of the Academic Advisors, and introduce their formal assessment.
- Increase the student's participation and confidence in the course evaluations.
- Attempt increasing the number of courses with a mandatory attendance policy.
- Improve the methods of course delivery and assessment.
- Consider annual teaching awards for excellence.
- Create a reading room for students.
- Increase outreach activities.
- Further reinforce participation and initiate education projects on climate change impacts, adaptation and mitigation.
- Ensure that the relevant and still valid recommendations of the 2012 External Evaluation Committee report will be implemented, and conduct a new SWOT analysis.

#### Addressed to UOTA

- Provide specialised seminars or courses on academic pedagogics, meeting also the needs for disabled students.
- Provide first aid training and emergency response procedures and drills.
- Comply with the regulatory requirements for personal data protection policy.

#### Addressed to the State Authorities

- Urgently:
  - Increase funding for additional fieldwork, teaching and laboratory equipment and for maintenance of the aged equipment and spaces;
  - Increase funding for elective/optional practical training and the amount of compensation;
  - Increase funding to attract and support external/guest lecturers and hiring temporary teaching personnel;
  - Secure housing opportunities.

#### IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 1, 4, 5, 7, 8, 9

The Principles where substantial compliance has been achieved are: 2, 3, 6, 10

The Principles where partial compliance has been achieved are: none

The Principles where failure of compliance was identified are: none

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

## The members of the Accreditation Panel

Name and Surname

Signature

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