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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:

**Marine Sciences**  
**Institution: University of the Aegean**  
**Date: 22/09/2019**

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**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 **Marine Sciences** 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 **Marine Sciences** of the **University of the Aegean** comprised the following four (4) members, drawn from the HQA Register, in accordance with the Law 4009/2011:

1. Prof. Constantin VAMVAKAS (Chair)  
Ghent University, Ghent, Belgium
  
2. Prof. Filippos TSIKALAS  
University of Oslo, Oslo, Norway
  
3. Assoc. Prof. Elena XOPLAKI  
Justus-Liebig-University Giessen, Giessen, Germany
  
4. Dr. Irimi FOTIADOU  
BP Europa SE, Bochum, Germany

## II. Review Procedure and Documentation

The Accreditation Panel (AP) convened on Tuesday 17<sup>th</sup> September 2019 at the Hellenic Assurance and Accreditation Agency (HQA) Headquarters in Athens. The AP was briefed by the HQA on the Quality Assurance (QA) 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 Marine Sciences (DMS) 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 DMS Proposal for Accreditation by the Internal Quality Assurance System, information on the quality indicators for the years 2015-2016, 2016-2017 and 2017-2018 as well as the DMS External Evaluation Report of 2013. In the afternoon of the same day, the AP flew to the Island of Lesbos. Subsequently, the AP met and discussed the strategy and issues to be considered during the site visit.

On Wednesday 18<sup>th</sup> September 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 DMS. Later, the Internal Evaluation Group (OMEA) together with representatives of MODIP (one of the MODIP representatives was connected through videoconference) joined the meeting, and the Head of the Department presented the department's current status, its strengths and areas for improvement. The AP had an extensive meeting with OMEA/MODIP and discussed the compliance of Marine Sciences undergraduate programme to the "Standards for Quality Accreditation for Undergraduate Programmes" set by HQA. Later on, the AP met teaching staff members to discuss the undergraduate study program, professional development opportunities, mobility, faculty workload and the teaching staff evaluation by students. Further, competence and adequacy of the teaching staff to ensure learning outcomes was stressed as well as links between teaching and research and the involvement of teaching staff in research activities and projects together with a wide-range of related departmental matters. Following that, intensive meetings through physical presence and videoconference took place with undergraduate and graduate students, graduates/alumni and their association, PhD candidates and finally several external stakeholders from the 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 19<sup>th</sup> September 2019, the AP visited the DMS premises and facilities. The AP toured research and teaching laboratories (biology, microbiology, chemistry, aquaculture and geology), equipment storage facilities, computer rooms, classrooms and lecture halls. Afterwards and following AP's request, a meeting and discussion with a randomly selected group of undergraduate students was held 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. Subsequently, a final closing 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. On the way to the airport, the AP visited the coastal vessel of the DMS ("ΑΜΦΙΤΡΙΤΗ") that is used for research and educational purposes. During the afternoon, the AP flew back to Athens.

From Friday 20<sup>th</sup> to Sunday 22<sup>nd</sup> September 2019, the AP worked on the Accreditation Report.

### **III. Study Programme Profile**

The DMS at UOTA is a dynamic department with 20-years history in marine studies covering a broad spectrum of oceanography and marine biosciences. Currently, the department consists of four (4) Professors, eight (8) Associate Professors, eight (8) Assistant Professors, six (6) Specialised Teaching Staff (EDIP), one (1) Specialised Technical Staff/Captain of the educational-research coastal vessel (ETEP) and three (3) Administration Staff.

The DMS is divided into the following six (6) Research Laboratories:

- i. Environmental Quality and Geospatial Applications
- ii. Marine Biodiversity and Ecosystems Managements
- iii. Ichthyology, Aquaculture and Fish Diseases
- iv. Ecology and Systems' Dynamics
- v. Physical and Chemical Oceanography
- vi. Coastal Morphodynamics-Management and Marine Geology

The annual number of newly admitted students determined by the State of Greece is 105 (2017-2018 data). However, the current total undergraduate student population amounts 864 persons, since a significant number of students fails to complete their studies within the normal 4-year cycle. The active student population graduates within 6.5 years on average.

OMEA data show the enrolled students and graduating students distributed as follows: 43.49% graduated in 4 years, 6.98% in 5 years, 4.65% in 6 years, and 44.88% in 6+ years. The number of students that successfully graduate in 4 to 6 years appears to have increased during the last years. For 2017-2018, the total DMS student enrolments were as follows: 864 undergraduates, 30 postgraduate (MSc), and 65 PhD candidates.

The DMS offers a BSc with a 4-year cycle (8 semesters) at the undergraduate level. The DMS is the only department in Greece that offers a BSc degree in oceanography. According to the 2019-2020 Student Handbook, the completion of the undergraduate programme requires 240 ECTS. These derive from 29 compulsory (mandatory) courses that provide 165 ECTS, a mandatory undergraduate thesis (Πτυχιακή Εργασία) with 20 ECTS, and 55 ECTS from a pool of 33 elective (optional) courses. A 2-month internship/practical training (Πρακτική Άσκηση) is optional and encouraged, pending availability and financial support. The programme of studies is adjusted to the students' needs on an annual basis and substantially reformed every 3-4 years, while the last substantial update took place in 2015-2016.

## 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 AP found an established quality policy statement by the academic unit, which includes its commitment to implement a quality policy that promotes the academic profile and orientation of the DMS undergraduate programme, its purpose and field of study. The quality policy statement aims at realising the programme's strategic goals and determines the means and ways for attaining them. The UOTA has established an appropriate Quality Assurance Unit clearly defining review processes, the programme's continuous improvement, and Key Performance Indicators (KPIs). The academic unit is in line with the institutional policy. The MODIP continuously monitors and enforces the Quality Assurance Policy that is applied and

guaranteed by a committee consisting of four (4) DMS members (OMEA). The DMS 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.

### 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 emphasizes that students' participation and their opinion are of significant importance for continuous improvement of the DMS undergraduate study programme. In addition, initiation and implementation of periodic self-assessments of the academic staff are recommended.

## 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

According to departmental documentation and academic staff presentations (OMEA), the design of the DMS undergraduate programme is based on high-quality European and international standards with emphasis on interdisciplinary and holistic knowledge and education. The comparison of the DMS curriculum with renowned institutions in the same field (e.g. NOCS Southampton UK, Gran Canarias Spain, University of Victoria Canada) shows a very good agreement. Established links between research and teaching in the undergraduate programme are obvious. The DMS 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 number of active students is high, allowing as well for the fact that ~50% of the students are in the programme for more than 6 years and thus are partially inactive. Considering the high number of students, the existing teaching and laboratory facilities and infrastructure fall short of the DMS capacity to offer optimal conditions for education. Students have expressed the need and wish for additional fieldwork and laboratory training. Furthermore, the very diverse background (in mathematics, physics, chemistry, biology or even lack of those) of the newly admitted students affects substantially the student progress and therefore the quality of the study programme.

The AP notices that the current number of offered common courses with relevant departments is relatively low and its potential has not been exploited adequately yet.

The procedure for the study programme revision is in place and guarantees the periodic internal review. The programme is refined on an annual basis and substantially reformed every 3-4 years (last update in 2015-2016). The procedure foresees consultation with stakeholders, external experts, students and graduates; however, this is not yet fully optimised.

Following the interviews with undergraduate students, alumni and academic staff, it was pointed out that currently there is lack of regulated profession rights for DMS graduates in teaching in the secondary education system. In addition, and based on interviews with stakeholders, there is currently lack of an established role/specialisation as oceanographer/marine scientist (BSc degree) in the Public Sector such as the National Coastal Guard and Hellenic Navy Hydrographic Service as well as the Merchant Navy, among others. It is noted that the DMS is the only department in Greece that offers a BSc degree in oceanography.

### 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. The AP urges the unfulfilled Recommendation #3 of the 2013 External Evaluation Committee (EEC) Report, supporting the DMS' repeated and urgent requests to the appropriate authorities that concern: i) the reduction of the amount of incoming students, ii) the adaptation of the incoming students' background towards natural or technological sciences and iii) the increase of technical support of DMS' study programmes. The DMS should lobby and further insist on these matters.
2. Additional fieldwork and laboratory training should be considered in the next study programme revision.
3. The DMS should strengthen its efforts in didactic coordination and collaboration towards common courses with relevant departments, such as the Department of Environment and the Department of Geography, among others.
4. The stakeholders and external experts of public and private sectors should be formally consulted for revisions and future planning of the study programme.
5. The UOTA, together with DMS, should strengthen their efforts to regulate the DMS graduate profession in the Greek secondary education system and public and private sectors.

### 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

In general, the AP considers that the DMS undergraduate programme is delivered in a positive student-centred learning environment that allows for different modes of delivery, flexible learning paths and mutual respect. The AP observed that for all lecture courses the overall grade can be assessed using multiple examination measurements within the EU standards. The course frameworks describe properly and in detail the contents as well as the assessment criteria methods.

The AP noted the low students' participation in the course evaluations, that is about 12% of all registered students. The percentage increases to 24% for active students that take part in

the exams. Students claim that they do not participate to the course evaluation as they believe that their opinion is not considered in the planning and reform procedures of the DMS study programme. Further, students mistrust the anonymity statement of these evaluation surveys. In addition, they claim that the questionnaires are lengthy and unclear. We note that the OMEA/MODIP have started already reviewing and improving the questionnaires.

Even though students are aware of the existence and function of the Academic Advisor, they do not use this service as they consider it either as redundant or manipulative.

### Panel judgement

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

### Panel Recommendations

1. The following steps should be made to increase the student's participation and confidence in the course evaluations:
  - a. Students should be electronically notified and reminded that the course is due for evaluation.
  - b. During class hours or at the beginning of an exam, the instructor should further emphasize the importance of participation in the evaluation process.
  - c. Other possible innovative ways (e.g. mobile phone app, visual display running video at department's entrance) should be adopted.
  - d. The DMS/UOTA should also consult other universities for effective employed ways.
2. The role and duties of the Academic Advisor should be further promoted to the students and adapted to the specific needs of the department. Communication and collaboration are very important and should be enhanced.
3. The DMS should find ways to strengthen student participation and involvement in the internal evaluation and continuous improvement of the study programme.

## 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 State examinations. It is important to state that the DMS has no control over the admitted undergraduate students.

The incoming students are welcomed and guided to DMS premises, activities, and study programme. The students' progression is properly monitored. High mobility rates provide evidence of the students' active encouragement to visit other academic and research institutions within the ECTS framework.

A proper Thesis Handbook has been prepared by DMS, clearly defining the quality requirements for the implementation of the compulsory undergraduate thesis (Πτυχιακή Εργασία). A 2-month elective/optional practical training (Πρακτική Άσκηση) 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. However, the current financial conditions discourage pursuing of practical training by a greater number of students.

## 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 amount of incoming undergraduate students should be reduced in order to meet the DMS teaching capacity.
2. The DMS should make further efforts to increase the students' participation in mobility programmes through enlargement of their Erasmus+ network.
3. Funding and co-funding of the practical training for students, mainly from the private sector, should be encouraged. The practical training should be further promoted to the students in the frame of a dedicated info-day where students, graduates and alumni share their experiences. Public sector stakeholders should be also included in the list of employers offering practical training with financial 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 DMS teaching staff makes use of the existing professional development opportunities. However, specialised pedagogic education is required to further establish innovative teaching methods, widen their implementation and thus to increase attendance of students. In this framework, dedicated pedagogic education to the teaching staff to support as well disabled students should be promoted.

The DMS consists of six (6) Research Laboratories that also define the educational and research areas of the department. The DMS has six (6) Specialised Teaching Staff (EDIP) that cannot fully cover the educational needs of the excessive student number. In addition, the DMS depends on only one (1) Specialized Technical Staff member/Captain of the educational-research vessel (ETEP) for its use and maintenance. Since there is an advanced plan to purchase a new and modern educational-research coastal vessel, the existing personnel is absolutely not sufficient.

Students are largely satisfied with the academic staff educational competence, open-mindedness, mentorship capabilities, cooperation and social competencies. Nevertheless, some students have stated the need for more attractive and inclusive teaching modes.

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

The DMS has established structures for academic staff collaboration with other universities, research laboratories and the industry.

## 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 for disabled students.
2. Additional resources of Specialized Technical Staff (ETEP) should be urgently budgeted and approved.
3. Undergraduate courses could be also enriched with external/guest lecturers that can cover specialised scientific subjects, thereby improving the quality of the study program.

## 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 DMS has the necessary facilities (classrooms, laboratories, IT infrastructure), however, additional investments on equipment are necessary to meet the large number of students. The DMS building provides an ideal working environment. It is modern, well designed and kept in very satisfactory condition. The teaching laboratories are well organized and meet the international safety standards; however, limited training on first aid is provided to the laboratory staff. The AP noticed that the DMS has a very good IT infrastructure in delivering video- and tele-conferences with a broader audience. The DMS has a very high-speed internet system and designated computational facilities with personal computers available to the students within the DMS. However, the support of the IT infrastructure is limited and requires additional resources.

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

The Department of Social Anthropology and History is hosted in a part of the DMS existing facilities (i.e., offices, classrooms and computer laboratories). This creates space issues. Furthermore, the central UTOA library is located in the centre of the city and far from the

campus. Due to the internal university regulations, all books and scientific material are located there and not to the relevant department.

A wide range of support services is currently available to the students; however, there is an urgent need for additional dormitories, considering the present conditions on the island of Lesvos.

### 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, teaching and laboratory (e.g., microscopes) equipment through the support of the University.
2. First aid training should be provided to all DMS staff.
3. Additional resources on IT infrastructure support should be prioritised.
4. The DMS should implement an emergency response procedure and frequent emergency drills.
5. Library regulations should allow relocation of the relevant books and scientific material to the DMS premises.
6. There is an urgent need for additional dormitories.

## 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 DMS 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 yet been fully implemented. This is already acknowledged by the UOTA and actions are underway.

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

The AP found that student participation in course evaluations is low, about 12% for registered students. The percentage increases to 24% for active students taking part in the exams.

The DMS 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/DMS should fully comply with the regulatory requirements for personal data protection policy.
2. The DMS should continuously promote the use of e-Class and explore all possible methods within the software to increase the student feedback.
3. The DMS should investigate and test alternative ways to increase students' participation 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 DMS website provides the necessary information regarding the academic unit and the study programme. The published information is up-to-date. The DMS website also delivers relevant information with environmental social and economic impact addressing local stakeholders and the general public.

The AP noticed a valuable collection of exhibition material of marine organisms for public outreach (e.g. schools) in one of the DMS laboratory space. The material is currently not properly stored and exhibited.

### Panel judgement

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

### Panel Recommendations

1. The DMS should investigate alternative ways, both through state and private funding, and sponsoring, for a proper exhibition area of the existing marine organisms' collection and additional exhibits.

## 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 academic unit 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 student participation and involvement of external stakeholders in the undergraduate study programme revisions are not optimal.

### Panel judgement

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes	
Fully compliant	X
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 improved and intensified.

## 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 2013, an External Evaluation Committee was appointed by HQA and evaluated the DMS. The DMS has seriously considered the proposed recommendations and followed up with a specific roadmap and implementation of actions. The DMS has provided transparent and detailed information on the department's responses and implementation grade for each recommendation since 2013. The AP found that the DMS complied with the large majority of the past review recommendations, however latest actions were not entirely evident in the provided documents.

### Panel judgement

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

## **Panel Recommendations**

1. The AP recommends that DMS should engage in the full implementation of the relevant and still valid recommendations of the 2013 External Evaluation Committee report. In particular, DMS should further:
  - a. Increase the offered courses in English, and assess the necessity of reintroducing the existing “English for Oceanography I/II” courses to the list of prerequisites.
  - b. Encourage and raise the number of publications at peer-reviewed journals.
  - c. Reinforce the established outreach plan towards the student body and the scientific community with research/educational projects on climate change impacts, adaptation and mitigation, at the European and global levels for higher department visibility and student attraction.

## **PART C: CONCLUSIONS**

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

- The DMS is the only department in Greece that offers a BSc degree in oceanography. The field and consequently the study programme of the DMS is highly interdisciplinary and encompasses a holistic approach.
- The department owns unique equipment and the coastal education-research coastal vessel “AMΦITPITH”.
- The design and revisions of the undergraduate study programme are based on comprehensive comparisons with internationally renowned institutions in the same field.
- At the DMS exist excellent and supportive relationships among students, academic and administrative staff.
- The DMS premises provide an ideal working environment and are kept in very proper conditions.
- The DMS attracts a significant amount of external funds.
- The DMS maintains an extensive network of public and private sector stakeholders.
- The DMS 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 DMS has seriously considered the proposed recommendations in the 2013 External Evaluation Committee and followed up with specific roadmap and action implementations.

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

- Limited fieldwork equipment with respect to the large number of students.
- Diverse background in natural sciences and low admission threshold of the newly admitted students.
- Relatively low student attendance in theoretical courses and participation in departmental and course evaluations and surveys.
- Limited Specialised Teaching (EDIP) and Specialised Technical (ETEP) staff. Dependence on a single Specialized Technical Staff/Captain of the educational-research vessel (ETEP) for its use and maintenance.
- 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.

### **III. Recommendations for Follow-up Actions**

#### Addressed to DMS

- The next study programme revision should consider:

- Increased fieldwork and laboratory training;
- Common courses with relevant departments;
- Involvement of external/guest lecturers on specialized scientific subjects;
- Additional courses in English, and reintroduction of the existing “English for Oceanography I/II” courses to the list of prerequisites;
- Consultation with stakeholders and external experts of public and private sectors.
- Intensify the efforts to regulate the DMS graduate profession in secondary education system, and public and private sectors.
- Increase students’ participation and confidence in course and internal evaluations. Continuously promote the use of e-Class and explore all possible methods within the software to increase student feedback.
- Promote further the role and duties of the Academic Advisor.
- Further increase the students’ international mobility.
- Encourage funding and co-funding of the practical training mainly from the private sector, and further promote the practical training for broader participation. Public sector stakeholders should be also included in the list of employers offering practical training with financial compensation.
- Further increase the number of publications in peer-reviewed journals.
- Further reinforce participation in and initiate research/education projects on climate change impacts, adaptation and mitigation.

#### Addressed to UOTA

- Intensify the efforts to regulate the DMS graduate profession in secondary education system and public and private sectors.
- Provide specialised seminars or courses on academic pedagogics, meeting also the needs for disabled students.
- Increase funding for additional fieldwork, teaching and laboratory (e.g., microscopes) equipment and prioritise additional resources on IT infrastructure support.
- Urgently budget and approve additional resources for Specialised Technical Staff (ETEP).
- Provide first aid training and emergency response procedures and drills.
- Modify university library regulations to allow relocation of relevant books and scientific material to the DMS premises.
- Urgently provide additional dormitories.
- Full compliance with the regulatory requirements for personal data protection policy.
- Investigate alternative ways, together with the DMS, for funding and sponsoring of a proper exhibition area of the existing marine organism collection and other exhibits.

#### Addressed to the State Authorities

- Urgently:

- Reduce the number of incoming students and adapt the admission requirements to DMS undergraduate study programme to allow only those with natural or technological sciences background.
- Increase funding for additional fieldwork, teaching and laboratory (e.g., microscopes) equipment and prioritise additional resources on IT infrastructure support.
- Budget and approve additional resources of Specialised Technical Staff (ETEP).
- Provide additional dormitories.
- Regulate the DMS graduate profession in secondary education system and public and private sectors.

#### **IV. Summary & Overall Assessment**

The Principles where full compliance has been achieved are: 1, 4, 5, 7, 8, 9, 10

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

The Principles where partial compliance has been achieved are: none

The Principles where failure of compliance was identified are: none

<b>Overall Judgement</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

**The members of the Accreditation Panel for the Undergraduate Programme  
Marine Sciences of the University of the Aegean**

Name and Surname

Signature

- **Prof. Constantin Vamvakas (Chair)**, Ghent University,  
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- **Prof. Filippos Tsikalas**, University of Oslo, Oslo, Norway
- **Assoc. Prof. Elena Xoplaki**, Justus-Liebig-University  
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