



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



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

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

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

Forestry and Natural Environment
Institution: Aristotle University of Thessaloniki
Date: 13 November 2021



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 HAHE to undertake the review of the Undergraduate Study Programme (Integrated Master) of **Forestry and Natural Environment** of the **Aristotle University of Thessaloniki** for the purposes of granting accreditation

TABLE OF CONTENTS

| | |
|---|-----------|
| Part A: Background and Context of the Review | 4 |
| I. The External Evaluation & Accreditation Panel..... | 4 |
| II. Review Procedure and Documentation | 5 |
| III. Study Programme Profile | 6 |
| Part B: Compliance with the Principles | 7 |
| Principle 1: Academic Unit Policy for Quality Assurance..... | 7 |
| Principle 2: Design and Approval of Programmes | 9 |
| Principle 3: Student- centred Learning, Teaching and Assessment..... | 12 |
| Principle 4: Student Admission, Progression, Recognition and Certification | 15 |
| Principle 5: Teaching Staff | 17 |
| Principle 6: Learning Resources and Student Support | 19 |
| Principle 7: Information Management | 21 |
| Principle 8: Public Information | 24 |
| Principle 9: On-going Monitoring and Periodic Internal Review of Programmes | 26 |
| Principle 10: Regular External Evaluation of Undergraduate Programmes..... | 28 |
| Part C: Conclusions | 30 |
| I. Features of Good Practice | 30 |
| II. Areas of Weakness | 30 |
| III. Recommendations for Follow-up Actions | 31 |
| IV. Summary & Overall Assessment | 34 |

PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme (Integrated Master) of **Forestry and Natural Environment** of the **Aristotle University of Thessaloniki** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Filippos Tsikalas (Chair)**
University of Oslo, Norway

- 2. Prof. Tala Awada**
University of Nebraska-Lincoln, USA

- 3. Dr. Demetrios Gatzolis**
USDA Forest Service, Pacific Northwest Research Station, USA

- 4. Dr. Rigas Giannopoulos**
Member of the Geotechnical Chamber of Greece, Greece

II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) received on 20/10/2021 the material on Quality Assurance Standards for Quality Accreditation of Undergraduate Programmes and Accreditation Guidelines from the Hellenic Authority for Higher Education (HAHE), and the relevant materials for the accreditation of the undergraduate study programme (Integrated Master) of the Department of Forestry and Natural Environment (DFNE), Aristotle University of Thessaloniki (AUTH). Due to the ongoing Covid-19 pandemic, the review of the undergraduate study programme took place virtually via Zoom, and on 02/11/2021 the EEAP received the final meeting timetable. The materials submitted by the Department included their Proposal for Accreditation by the Internal Quality Assurance System, information on the annual quality indicators for the years 2015-2020 and the DFNE External Evaluation Report of 2012.

On Monday 08th November 2021 (18:00-20:00), the EEAP met virtually and discussed impressions on the received materials, allocation of tasks and the strategy and issues to be considered during the scheduled teleconferences. On Tuesday 09th November 2021 (18:00-22:00), the EEAP 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 EEAP was briefed on the history and academic profile of the AUTH and DFNE. The Head of the Department also presented a brief overview of the Department. Later, the Internal Evaluation Group (OMEA) together with representatives of MODIP joined the meeting, and the OMEA Coordinator presented the Department's current status, strengths and areas for improvement. The EEAP met with the OMEA/MODIP representatives and discussed the compliance of the Forestry and Natural Environment undergraduate programme (Integrated Master) to the "Standards for Quality Accreditation for Undergraduate Programmes" that are set by HAHE. At the end of the day, the EEAP had a short internal debriefing meeting to reflect on the impressions of the first day and prepare for the second day of teleconferences.

On Wednesday 10th November 2021 (18:00-22:00), the EEAP 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, the EEAP met and discussed with nine (9) undergraduate students selected by the Department. Subsequently, an online tour of classrooms, lecture halls, research and teaching laboratories, library and other facilities was offered followed by discussions with relevant faculty and staff. The tour was viewed by EEAP prior to the meeting. The day ended with a short internal EEAP debriefing meeting to reflect on the impressions of the second day.

On Thursday 11th November 2021 (18:00-22:00), the EEAP met with nine (9) DFNE graduates with a wide range of graduation years and professions, and later on with several external stakeholders and partners from relevant public and private sectors. Subsequently, the EEAP had a final meeting with the OMEA and MODIP representatives, with the Vice Rector and Head of the Department joined the same meeting later. Clarifications on EEAP impressions were requested and offered. Later on, the EEAP had a short internal debriefing meeting to discuss the outcomes of the virtual meetings and to initiate the writing of the report.

During late Thursday 11th November to Sunday 14th November 2021, the EEAP worked on the Accreditation Report.

III. Study Programme Profile

The DFNE at AUTH is a dynamic organization with more than 100-years history in forestry and natural environment studies covering a broad spectrum of related fields. Currently the department consists of 17 Professors, 12 Associate Professors, 3 Assistant Professors, 16 teaching staff (EDIP), 2 specialized technical staff (ETEP), and 6 administration staff.

The DFNE is divided into the following five Divisions (Τομείς):

- i. Forest Production – Forest Protection – Natural Environment
- ii. Rangeland Science - Wildlife Management and Fresh Water Fisheries
- iii. Planning and Development of Natural Resources
- iv. Forest and Water engineering
- v. Harvesting and Technology of Forest Products

These Divisions comprise of 16 laboratories, and the Department has its own study and design/drawing rooms. The DFNE Laboratory of Forest Informatics maintains a lab equipped with personal computers (Νησίδα Η/Υ). The AUTH owns two University Forests used for practical training and research. One in Pertouli (eastern Pindos range) expanding over 3,300 ha and the other in north-central Chalkidiki (Taxiarchis) with 5,800 ha. The University Forests Fund is the sole authority for the administration and management of the University Forests.

The number of the annually admitted students determined by the State of Greece is 140 (DFNE proposes 80). Following numerous transfers for special reasons the number reaches 176 (2019-2020 data). However, the current total undergraduate student population amounts 1491 persons, since a significant number of students fails to complete their studies within the 5-year cycle. The mean time for student graduation is 6.78 years (2018-2019 MODIP/OMEA data).

The DFNE offers a UGP with a 5-year cycle (10 semesters) at the undergraduate level (Integrated Master). The DFNE covers a broad spectrum of scientific fields in forestry and natural environment. According to the 2020-2021 Student Handbook (newly introduced/revised programme of study), the completion of the undergraduate programme (Integrated Master) requires 300 ECTS. These derive from 16 core and 35 specialized compulsory (mandatory) courses that provide 231 ECTS, a mandatory 4-month summer practical training in the two university forests and forest services/companies that provides 19 ELTS (allocated to the end of the 4th, 6th and 8th semester of studies), a mandatory undergraduate thesis (Διπλωματική Εργασία) with 30 ECTS during the last semester of studies, and 20 ECTS from a pool of 10 elective (optional) courses. A two-month internship/practical training (Πρακτική Άσκηση ΕΣΠΑ) is optional albeit encouraged with mandatory provision for detailed information on mutual student and trainer evaluations. The programme of studies effectively unmodified for several years, has recently (2019) been reformed. The new undergraduate programme (Integrated Master) was inaugurated in academic year 2020-2021, yet the older programme remains in effect for undergraduate students with first year of enrolment prior to 2020.

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 organisation 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 AUTH has established an entity known as the Quality Assurance Unit (MODIP) with mission to clearly define Department, Faculty, and University review processes, oversee improvement efforts, and calculate Key Performance Indicators. The MODIP continuously monitors and enforces the Quality Assurance Policy that is supervised by a committee of six (6) DFNE members (OMEA). The DFNE 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. However, there is no formal annual review or internal audit of the quality assurance system of the undergraduate program. Relevant information is shared with involved

parties and posted to the AUTH/MODIP intranet, but past Internal Evaluation reports are missing from the DFNE website.

The EEAP 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 DFNE undergraduate programme, its purpose and its field of study.

The DFNE maintains a monitoring committee responsible for the undergraduate programme that in collaboration with the other formal authorities oversee the implementation, progress and potential future needs for flexible adjustment/modification in the undergraduate study programme.

Panel Judgement

| Principle 1: Academic Unit Policy for Quality Assurance | |
|--|---|
| Fully compliant | X |
| Substantially compliant | |
| Partially compliant | |
| Non-compliant | |

Panel Recommendations

- The EEAP acknowledges the quality assurance procedures by the DFNE and recommends that the Department should find ways to encourage students and student representatives for active involvement in the continuous improvement of the undergraduate study programme.
- The EEAP acknowledges the retention of the monitoring committee responsible for the undergraduate programme and urges the DFNE to continue to reinforce this practice.
- An annual review and an internal audit of the quality assurance system of the undergraduate programme should be established.
- All (current and past) Internal Evaluation Reports by OMEA should be published on the DFNE website. This will promote transparency that will help to bring out the needed improvements.

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 strengths of the DFNE undergraduate programme lie on the broad spectrum of fields covered in teaching and research, as well as on the integration of fieldwork/practical training within the frame of the offered courses. The DFNE undergraduate programme promotes and emphasises interdisciplinary and holistic education. Links between research and teaching in the undergraduate programme do exist but should be further strengthened by regularly updating the course contents and providing additional experiential learning and critical thinking skills to students. Despite the extensive number of offered courses in comparison to similar undergraduate study programmes in similar institutions abroad, the DFNE undergraduate study programme curriculum is well-articulated and comprehensive. The ECTS system is applied across the curriculum with approximately one ECTS corresponding to 25-30 student workload hours; however, most courses correspond to 30 hours. The EEAP notes that the current international trend is for one ECTS to correspond to 25 hours.

The description of the learning outcomes within the course frameworks (syllabi) lack standardization and divert in the amount of information conveyed (e.g. 21E/26E/33E/082E and

24E/064Y/64E/084Y: just indicative of courses with short/extensive text range descriptions on the learning outcomes).

The EEAP found that the design and curriculum of the DFNE undergraduate study programme compared to those of high-quality/renowned European and international programmes and universities is lacking in the supporting DFNE documentation for the current accreditation, and that such comparison, if presented, would have been beneficial and promote the reputation of the DFNE undergraduate study programme.

Following the recommendation of the External Evaluation Committee in 2012, the DFNE has drafted a 5-year Departmental Strategic Plan (2022-2026). The EEAP finds that, as presented, the strategic plan is too generic, lacking specific and quantitative goals and measurable outcomes for the undergraduate programme. Guided by established international practices and aiming towards excellence, the EEAP finds that a more specific and targeted strategic plan should be established that should be kept updated and reviewed on an annual basis.

The high number of admitted students with diverse, often non-overlapping backgrounds curtails the student progress potential and, indirectly, the quality of the study programme. In addition, the high number of both the admitted and enrolled student past the 5th year of study taxes the existing teaching and laboratory facilities and infrastructure. The existing laboratory infrastructure does not offer optimal conditions for hands-on training to all undergraduate students. To mitigate this obstacle, the DFNE is organizing multiple laboratory sessions for the same topic with reduced number of students in each, thereby allowing for a more active participation and training.

The programme of studies has not changed since the last External Evaluation in 2012 and the anticipated framework of regular reforms on 3-5-year basis was not implemented. However, following efforts by the DFNE during the last years, a substantially reformed/new undergraduate programme (Integrated Master) has been introduced in 2019 and was initiated in the 2020-2021 academic year. The EEAP notes the need for a substantive, periodic study programme revision. The procedure should also foresee a more formal and comprehensive consultation with stakeholders, external experts, students and graduates. A form of advisory/consultation panel comprised of alumni and external stakeholders may be considered.

Both alumni and stakeholders expressed their positive views for the programmes' graduate knowledge and acquired abilities. They commented on the dedication of faculty and staff to their success and attested that the programme meets the expectations set by the Geotechnical Chamber of Greece.

Panel Judgement

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

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

Panel Recommendations

- In the next study programme revision, the DFNE should consider assigning one ECTS to 25 student workload hours.
- Established links between research and teaching in the undergraduate programme should be further strengthened by regularly updating the course contents and providing additional experiential learning experience to students.
- The DFNE should make efforts towards standardized descriptions of the learning outcomes within the course frameworks (syllabi).
- To meet self-imposed requirements for excellence and enhance its reputation and status, the DFNE undergraduate study programme should offer direct, quantitative comparisons to curricula followed by Forestry and affiliate Departments in renowned European and global programmes and universities. Periodic regular reforms of the study programme on 3-5 years basis must be envisioned.
- The 5-year Departmental Strategic Plan should set more specific and quantitative goals and measurable outcomes for the Department's undergraduate programme and review them on an annual basis.
- The number of incoming and enrolled students should be reduced.
- The stakeholders and external experts of public and private sectors should be formally consulted for revisions and future planning of the study programme. We propose a development of an external advisory board to engage with the Department.

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 DFNE undergraduate programme is organised in a positive, student-centred learning environment that allows for variability in modes of delivery and offers flexible learning paths. Continuous and diligent effort is needed to integrate and evolve different ways that can improve the attendance levels. The EEAP observed that, in general, besides the written exams and laboratory assignment, other student assessment methods (e.g. πρόοδος partial performance/mid-term examinations, homework assignments, group projects) are not fully and explicitly utilised in the curriculum and objectively weighted towards the final course grade. Most course frameworks (syllabi) describe in detail the contents as well as the currently utilised assessment criteria methods.

Following the recommendation of the External Evaluation Committee in 2012, in the newly introduced undergraduate programme (initiated in 2020-2021) the DFNE introduced for incoming students the course “Introduction to Forestry Science” and reduced the numbers of courses required for the final degree. The EEAP acknowledges the compliance efforts of the DFNE and the resulting adjustments. However, in the next periodic revision of the study programme serious considerations should be given to a further reduction in the number of courses by fusion/merging of courses that show significant overlap and transform them to interdisciplinary ones or by elimination of obsolete ones or by compacting those with voluminous syllabi. The EEAP acknowledges the mandate for 300 ECTS as prerequisite for maintaining the programme at the Integrated Masters level. The proposed reduction in the number of courses shall not be interpreted as reduction to the workload of or learning opportunities for the students. Instead, the revisions should aim for further consistency and in-depth knowledge rather than offering a very wide (but rather shallow) approach through electives. Revisions should be also guided by up-to-date approaches to the profession of forestry, with a larger focus on research methods and even basic coding skills in statistics, data analysis and modelling (all these aspects addressed by alumni and stakeholders), so as to reflect the needs of the market, both domestic and international. Prospective graduates need to combine contemporary practical applications in the theoretical knowledge they acquire through the study programme (e.g. Forest Cadastre implementation in Greece), as well as the ability to manage and take preventive measures in combating climate change outfall, the ability to manage grazing areas, and the ability to conduct a full forestry management study in its entirety.

HAHE/MODIP data (DFNE Material - B9 Δεδομένα Ποιότητας.pdf - pages 36-37 for academic year 2018-2019) show that the graduating versus enrolled students for that academic year are 4.86% (64/1317) and are distributed as follows: 0.0% (0/1317) graduated in 5 years, 1.67% (22/1317) in 6 years, 1.37% (18/1317) in 7 years, and 1.82% (24/1317) in 7+ years. Similarly (DFNE Material - B9 Δεδομένα Ποιότητας.pdf - pages 32-33, 28-29, 24-25), for academic years 2017-2018, 2016-2017 and 2015-2016 the gross graduation is 11.03% (137/1242), 5.90% (78/1321) and 1.63% (38/2336), respectively. The EEAP acknowledges that the above numbers are biased due to the high number of enrolled students (not differentiating between active and inactive ones); nevertheless, it finds these numbers quite devastating, and underlines that their improvement should be one of the immediate priorities for the Department.

The EEAP noted the moderate to low participation of students in the course evaluations despite the efforts of the Department; that is 9.9% of all registered students (2020-2021 MODIP data; DFNE Material - B6 Στοχοθεσία ΠΠΣ.pdf - page 1: A2/K2: current value). The EEAP acknowledges that the low percentage is biased as participation in actively enrolled students is considerably higher. The EEAP expects the active student involvement in course evaluations and through their representatives will increase as soon as changes induced by this process are noted by students.

Students are not fully aware of the actual role and services offered by the Academic Advisor and how they can be benefited from such a resource. Many are under the false impression that this service is just cosmetic and redundant.

The EEAP notes the efforts implemented by the DFNE to tackle the imposed teaching and research challenges during the current Covid-19 pandemic. The DFNE has handled the situation well. Supported by University infrastructure and resources, made noteworthy progress in digital engagements and expanded the availability of e-learning material. Those can be developed further towards supporting the theoretical, laboratory, and fieldwork components of the curriculum.

Panel Judgement

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

Panel Recommendations

- Increase the number of courses that use enriched student assessment methods using multiple examination measurements with class expectations and grading communicated clearly in the curriculum.
- The DFNE should implement strategies to increase the participation of students and their confidence in the course evaluations.
- The DFNE should find ways to strengthen participation and involvement of students and student representatives in the internal evaluation and continuous improvement of the study programme.
- In the next regular revision of the undergraduate programme, the DFNE should seriously consider further reduction in the number of courses by a. fusion/merging of the several that show significant overlap and transform them to more multidisciplinary ones, b. elimination of obsolete ones, and c. by shrinking the ones that contain too expanded syllabi. Specific attention should be given to contemporary practical applications (e.g. Forest Cadastre implementation in Greece, basic data analysis and programming skills in an object-oriented language such as R or Python with emphasis on geospatial analysis), as well as the ability to manage and take preventive measures in combating climate change outfall, and the ability to manage grazing areas. Ensure that at graduation time all students can complete and articulate to co-workers and the public a management plan for a compartment, forest or watershed autonomously (unaided).
- The DFNE must develop a framework and an implementation plan to considerably improve graduation rate.
- The role and responsibilities of the Academic Advisor should be further promoted to the students and adapted to the specific needs of the Department. The students, at least in the first two years, should be encouraged to contact frequently the Academic Advisor. A formal assessment of Academic Advisors by students should be considered.

Principle 4: Student Admission, Progression, Recognition and Certification

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

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

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

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

Study Programme Compliance

The EEAP acknowledges the hard work of faculty to create an inclusive environment for the students. Faculty and staff are dedicated to the success of the program, and this was demonstrated throughout the review and was confirmed by the alumni and stakeholders.

Incoming students are mostly admitted via state examinations and the DFNE has no control over the number of the admitted undergraduate students. Once on campus, the Department offers incoming student orientation sessions that include information on the Department, faculty, staff, curriculum, expectations, and overview of facilities, resources and services available to students. The Department website provides an overview of the programme, specializations, step-by-step instructions on admissions, expectations for graduation, and information about the facilities. There could be improvements made to the website with regards to faculty and staff profiles (there are some inconsistencies in the way information is presented related to the CVs and other scholarly materials), and also highlighting students and alumni successes.

A proper Thesis Handbook has been prepared by DFNE and is available, clearly defining the quality requirements for the implementation of the mandatory undergraduate thesis (Διπλωματική Εργασία). Quality control for the thesis is achieved by the final examination committee.

The student mobility and participation in professional development opportunity at the DFNE is low. Only a small number of students take advance of the ERASMUS+ programme although there is a well-documented and transparent ECTS equivalence between DFNE and foreign institutions.

One of the strengths of the DFNE is that the attained knowledge is integrated in the mandatory fieldwork/summer practical training that is offered as individual courses with

corresponding ECTS workload; several other multi-day field courses are part of the curriculum. Fieldwork training is widely accepted from the students.

A two-month internship/practical training (Πρακτική Άσκηση ΕΣΠΑ) is optional and incorporates transparent selection ranking based on student progression and performance/grades. Students value the practical training as a first step towards the undergraduate thesis and/or the job market. The EEAP notes that there is a strong demand among the students for participation in the practical training. The DFNE should sustain efforts to increase the number of such opportunities, and the Greek State should increase both the funds and the amount of compensation for the practical training.

Alumni and stakeholders pointed out that the program needs to include more soft skills training and greater experiential learning experiences. Improvements can be made to engage with alumni and local stakeholders. Professional development activities are key for student success, and the webpage and direct engagement opportunities can serve as a conduit for those.

Panel Judgement

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

Panel Recommendations

- Student global engagement and participation in professional development activities need to be actively encouraged and opportunities provided, even if the ERASMUS+ programme is providing limited funding. The person(s) responsible for student mobility together with the teaching staff should find additional and alternative ways (e.g. dedicated lectures, active web-site promotion etc) to inform students about the benefits of participating in the ERASMUS+ network programme.
- The undergraduate study programme needs to include more soft skills training and greater experiential learning experiences. The DFNE should seek and sustain efforts to increase the number of the two-month internship/practical training opportunities.
- The Greek State should increase both the funds allocated to and the amount of compensation for the practical training.
- Create a stakeholder advisory committee that engages with the Department, staff and students.
- Increase research expenditures through projects/grants/contracts, improve laboratory facilities and expose students to the new technologies. This is critical moving forward for the long-term success and relevance of the study programme.
- Recognize and highlight faculty and student successes and create press releases on the Department website.

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 recognise 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 DFNE teaching staff makes 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 and special needs students should be promoted.

Students are largely satisfied with the academic staff teaching competence, open-mindedness, mentorship capabilities, cooperation and social interactions. They highlighted the dedication of the teaching staff to their success. Nevertheless, some students have stated the need for more attractive and inclusive teaching modes. Consideration should be given to introduce annual teaching awards for excellence based on transparent and objective criteria.

Established links between research and teaching in the undergraduate programme are there (apparent from the subjects of the offered core and elective courses as well as the undergraduate thesis topics that are linked to research projects) but should be further strengthened by regularly updating the course contents and providing additional experiential learning experience to students.

The DFNE has established structures for academic staff collaboration with other universities, research laboratories and the public and private sectors. Increase research expenditures through projects/grants/contracts, improve laboratories facilities and expose students to the new technologies. This is critical moving forward for the long-term success and relevance of the program. This very good practice should be further promoted.

The DFNE invites external/guest lecturers to address topics in specialised scientific subjects and seminars. We encourage this activity with national and international universities.

This can also be taken a step further to deliver online virtual courses to increase efficiency, improve faculty productivity, and broaden the students' experiences.

Panel Judgement

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

Panel Recommendations

- The EEAP recommends that the AUTH should provide (or speed up the establishment of) specialised seminars or courses on academic pedagogics, also meeting the needs for disabled and special needs students.
- Partner with other Greek and international universities on the delivery of online virtual courses to increase efficiency, improve faculty productivity, and broaden the students' experiences.
- Strengthen the research seminar program, invite national and international scholars/leaders from the private and public sectors/NGOs and involve students at all levels and from all programs.
- Strengthen the student exchange and study abroad programs.
- Provide opportunities to students to develop their soft skills.
- Support and facilitate project/grant training activities for faculty.
- Encourage and support the professional development activities of faculty, staff and students. This includes but not limited to international professional meetings, seminars, and full or mini-sabbaticals.
- Consideration should be given to introduce annual teaching and research awards for excellence based on transparent and objective criteria.

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

Since the review was performed virtually, the Department shared videos, virtual tours, PowerPoint presentations and described the resources via Zoom. Also, the departmental website offers some additional information on the resources and services available to faculty and accessible to students.

The DFNE provides to the students facilities that include classrooms, laboratories, educational and scientific equipment, computational facilities with personal computers (Νησίδα Η/Υ), dedicated library and library-study, and information and communications services.

The teaching laboratories are well organized and meet the international safety standards; however, limited training on first aid is provided to the laboratory staff.

From the virtual tours and discussions with faculty and students, the EEAP considers that Department instrumentation sharing amongst faculty and students could be further strengthened. It is critical that students have safe access to labs and instruments as part of their experiential learning and training.

The EEAP observed lack of emergency response procedures/training and emergency drill for the two compounds where the DFNE is placed (Foinikas building and Faculty of Agriculture, Forestry and Natural Environment building at AUTH campus), a liability that concerns the entire university.

Panel Judgement

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

Panel Recommendations

- The facilities and resources of the Department seem adequate, however, if the Department is aspiring to become the epicentre of forestry research and education for climate change, serious upgrades would be necessary.
- Students need to have a better access to instruments as part of their experiential training experience.
- First aid training should be provided to the DFNE staff.
- The DFNE/ AUTH should implement an emergency response procedure and frequent emergency drills.

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 organization, teaching and provision of services to students as well as to the academic community.

Reliable data are 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 analyzing 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 DFNE assesses student performance and status indicators via procedures conceptualized and implemented by the University Quality Assurance Unit (MODIP). The ensuing standardization facilitates estimation of trends within and across Departments. Key indicators include the number of students that enter, transfer into or quit the programme annually, study completion rates in 5, 5+2, or more years, total enrolment of active and dormant students per year, student frequency in Grade Point Average (GPA) categories, and student participation rates in various activities (exams, lectures, lab sessions, field excursions, assignments, etc.) Student performance is evaluated in written exams comprising short/verbose-answer, multiple-choice questions, written assignments. Also, in oral exams, lab assignments, presentations, or reports. Participation rates in each of the activities is monitored using relevant forms. All relevant information is stored in digital form and is accessible by faculty and administrators.

The data suggests that in the academic years of 2015 to 2018, the number of students with graduating GPA greater than 8/10 is volatile but consistently below 10%. The mean graduating GPA for the same period exhibits an encouraging, monotonic increase from 6.80 to 7.03 but it is unclear whether the improvement is statistically significant. This statistic is in

alignment with the fact that although participation in the exams over the past 9 years holds steady at just above 50%, the rate of failures is decreasing slowly.

In the decade starting in 2011 the mean per annum graduation rate was 75.3%. Presently the total enrolment is 1491, an astoundingly high number.

Students are presented with the opportunity to evaluate the faculty and support personnel via anonymous surveys. At the inception of this effort student participation rates were rather low, approximately 1 in 8, sometimes even lower. Drastic reductions in survey questions and the advent of electronic submission have led to rate increases. If students in the graduate programme are included, the participation in the course and faculty evaluation surveys for the last academic year increases to about 3 in 4, a rate that corresponds to the mean across all University departments. Among the Faculty of Science, Polytechnic, and Faculty of Agriculture, Forestry and Natural Resources the DFNE ranks 3rd out of 15.

To ensure that the feedback communicated with the surveys is representative of the active student population, the submission windows are conveyed to the students during class or lab sessions.

The students selected by the DFNE to participate in discussions with the EEAP expressed satisfaction with the undergraduate study programme and the options and resources that are available to them. They valued the holistic approach and their exposure to a variety of specialization sectors, without much concern that plurality comes at the expense of in depth learning and acquisition of practical skills. Students pursuing the older programme agreed unanimously on the realization that the interdependency of courses and associated information became apparent to them only after their practical training in the University Forests. The students confirmed that faculty members are accessible and willing to address their inquiries. They mentioned that class attendance is positively associated with courses of interactive content and development of practical skills, especially those that link to software applications.

The DFNE monitors the career paths of the graduates indirectly, in collaboration with the Geotechnical Chamber of Greece. Additional information is obtained opportunistically during informal exchanges between graduates and faculty members. The Department encourages student participation in the Greek Forestry Students' Association (GFSA), IFSA LC Thessaloniki, a group that is locally active and member of the International Forestry Students' Association (IFSA).

The Department's ability to secure comprehensive information regarding student satisfaction with the programme, and, in response, make any necessary adjustments may be inhibited by the need for questionnaire standardization promoted by MODIP. A single, customized, Department-specific question added to the questionnaire is not enough. An additional limitation emerges from the fact that rigorous privacy rules preclude any association between suggestions made or expectations voiced and student performance records (e.g. GPA). The interviewed students overwhelmingly attested that they are not at least concerned of links between the feedback they provide and their person, as long as the analysis of the data is performed by accredited MODIP personnel.

Panel Judgement

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

Panel Recommendations

- The DFNE and MODIP should invest in a more in-depth evaluation of the information provided in the course evaluation surveys and explore multivariate analyses instead of metrics of central tendency.
- The DFNE should investigate and test alternative ways, including tangible incentives, to increase participation of students in the course evaluations.
- The DFNE should increase the quantity, quality and statistical representativeness of the graduate career path records via tighter collaboration with the Geotechnical Chamber of Greece and other relevant professional associations. The statistical outcomes must be easily accessible in the DFNE website.
- The DNFE should explicate and publicize annually how is capitalizing on the information content of student satisfaction surveys.

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 DFNE website provides the necessary information regarding the academic unit and the study programme in both Greek and English. It includes the present and previous course descriptions, academic calendar, detailed information on the locus and timing of courses for the current semester, links to offered and suggested textbooks with ordering links, and updated announcements for the students, including applications for participation to European academic programmes such as the ERASMUS+. The web portal informs on the availability of labs, computer infrastructure, food and boarding, even how to fill and submit a grievance form. There are also numerous links, properly categorized, to professional accreditation, scholarships but practically all of them refer to University-managed resources, not those of the Department, and as such lack the level of specificity needed and expected by the viewers. In addition to textbooks, the Department provides to students electronic access to software licenses, course syllabi, and outlines of expectations for each course. Both the Department and the University have made remarkable progress in their digital engagement since the last external evaluation a decade ago. The published information is generally up-to-date, although the website design is slightly outdated and the timing of the last update for each page is typically missing.

There is, however, lack of standardization in certain elements of the information provided. Many course descriptions and content are complete, others are somewhat lacking. The same applies to Curricula Vitae. Selected faculty members have CVs with information content comparable to international standards with full list of publications, activities, studies, courses taught and other information. Other faculty members present a very brief (condensed) CV, while a few have none. Content of individual pages is not cross-referenced. For instance, personal pages of faculty members provide detailed information of courses taught but not links to corresponding course pages. The English version of the web portal contains numerous spelling errors (e.g. "Research > Hellenic Foundations For Research And Innivation," instead of 'Innovation'). While these shortcomings can be dismissed as simple semantics by internal or local audiences, they can be regarded negatively by others accustomed to more fastidious international standards. In either case, the website is the digital representative of the Department, and its structure and content should be an elevated priority.

There are areas with ample room for improvement. Those pertain to the limited relevant information addressing environmental, social and economic programme impact towards local stakeholders and the general public. Further, the EEAP was unable to find on the web portal

information on how student feedback was evaluated by the DFNE and what actions, if any, ensued. Nor any information regarding statistics on student course-completion rates and detailed graduate employment information.

Panel Judgement

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

Panel Recommendations

- Data on student, faculty, and external evaluations should be publicly available at the DFNE website in a form that is easily interpretable, instead of sporadic and often esoteric references to MODIP and AUTH sites.
- The DFNE is encouraged to develop templates for coursework and relevant information, as well as for faculty Curricula Vitae, complete with cross referencing and update times.
- The DFNE should keep updated and detailed employment records and statistics for its graduates via collaboration with the Geotechnical Chamber of Greece based on the «Geotechnical Employment Register», taking in consideration GDPR rules and restrictions.
- The DFNE should disseminate via its own web portal, detailed information on student mobility, participation in international programmes, frequency and origin of visiting students and scholars. Also, improve its presence in established and emerging social platforms.
- Via its website the DFNE should increase outreach, for example:
 - ✓ Develop and manage a site for alumni and publish information that targets this group specifically.
 - ✓ Relevant information can be on the DFNE strategic initiatives, faculty research distinctions and awards, and upcoming seminars.
 - ✓ Publish opportunities for visits and engagement with the undergraduate program.
 - ✓ The website should include job opportunities in the DFNE as well faculty and other support staff recruitment efforts.

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 DFNE in collaboration with OMEA/MODIP has established the annual self-assessment procedure of the study programme in accordance with the Quality Assurance Requirements. The internal assessment outcomes are recorded, compiled, and conveyed to the Quality Assurance Unit of the University. They correspond to the student-oriented learning principle adopted by the DFNE. The latest Internal Evaluation is for academic year 2019-2020 and HAHE Inventory Bulletins for the DFNE are available online, however the EEAP noted that the DFNE website should also contain all Internal Evaluation Reports covering previous years to facilitate easy access of information.

The EEAP noted that students' participation and involvement of external stakeholders in the undergraduate study programme revisions should be enhanced further.

Interviewed students of the old and new programme noted that the course workload is not always in agreement with the assigned ECTS value but that there is no provision in the evaluation forms that they are asked to fill for such information. It was also noted that many faculty members strive to include updated content in the coursework, a process that is facilitated by conducive electronic means provided by the University and supported by the Department's digital infrastructure. The Department reports that although the adaptation of recommendations to reduce the total number of mandatory and elective courses made by the External Evaluation Committee in 2012 was initiated early on, the formal endorsement of the changes was delivered only 7 years later. A more flexible learning environment is further inhibited by the requirement to maintain the old programme even well after the adaptation of a new one.

Panel Judgement

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

Panel Recommendations

- To promote transparency and confidence for objectivity in programme assessment efforts, annual Internal Evaluation Reports should be promptly published on the DFNE and MODIP websites. MODIP should supply a user-friendly export solution of the Internal Evaluation Reports.
- The students' participation and the involvement of external stakeholders in the undergraduate study programme revisions should be enhanced further and potentially pursued under a formal process.
- 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 HAHE, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

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

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

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

Study Programme Compliance

Unlike 2012, the present evaluation conducted by the EEAP was seriously impacted by the nuances introduced by the pandemic. Despite diligent efforts by all participating sides, the evaluation may have not been as thorough as the EEAP members would like. Forty-five minutes with only a few students whose academic performance may not be representative of the student body is simply not enough. According to the data provided by the Geotechnical Chamber of Greece (2000-2020 employment record data), nearly half of the graduates are unemployed while others work in unrelated professions. The experience and opinions of those groups have not been sampled. To a lesser extent, the same may apply to the stakeholder group. Regardless of logistics, there is little doubt that the DFNE has made noteworthy progress since the previous external evaluation. Several elements of student and self-evaluation are in place and relevant information is compiled periodically and is distributed in digital form. There is evidence that certain recommendations have been implemented fully, others to lesser extent. In addition, the EEAP finds that the provided information lacks sufficient detail on the utilised roadmap (implementation grades and implementation year/time). There is no detailed action plan.

Full implementation of all recommendations made by external evaluation committees, although attractive in principle, may not be realistic. The DFNE must cope with an influx of new students that by international standards is extraordinarily high while dealing with historically low funding. It is practically obliged to offer a very large number of courses necessary for the professional accreditation of the graduates. For a comparable range of accreditations several Departments are required in countries with long tradition in forestry and natural resources. With such a heavy coursework, maintaining a balance between theoretical and practical training, and, by extension, employability, at least by international standards, is a tall order. The

expectation for compliance or at least alignment to the recommendations made by external evaluation committees comprising members with experience in international institutions may be antithetical to the legislative framework they must operate under. It might be purely utopian. Curiously enough though, many graduates and stakeholders agree that emphasis on a comprehensive theoretical background is an advantage that must be preserved at all costs rather than a liability. What would amount as an oddity in most countries could very well be an undeniable niche in Greece.

The Department's faculty are confident that a semester devoted exclusively to the graduation thesis (Διπλωματική Εργασία) restores a balance between theoretical background and practical skills. The same engagement is reported as building expertise in scientific writing, reading of international literature, and instilling elements of professionalism.

Panel Judgement

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

Panel Recommendations

- The Department should establish short, medium, and long-term development goals and devise quantitative criteria that can be used to objectively assess whether the goals are met. A 10-year planning horizon, from one external evaluation to the next, is too long.
- The Department should capitalize on its presence in the largest University Campus in the country and consider options for shared teaching resources with other Departments operating in the field of natural resources. Seek opportunities to consolidate courses so that faculty members are subjected to a healthy balance between teaching and research activities.
- A detailed action plan and implementation grade to any recommendations should be provided with the accreditation/evaluation (this also includes recommendations made in 2012 External Evaluation Committee report that remain relevant).

PART C: CONCLUSIONS

I. Features of Good Practice

- The strengths of the DFNE undergraduate programme lie on the broad spectrum of related fields covered in teaching and research, as well as on the integration of fieldwork/practical training.
- A constructive relationship among students, academic and administrative staff is evident.
- The DFNE premises provide a good working environment with space kept in satisfactory conditions.
- The DFNE maintains a monitoring committee responsible for the undergraduate programme that can quickly resolve emerging issues.
- The DFNE attracts a significant amount of external research funds.
- The DFNE maintains an extensive network of public and private sector stakeholders.
- The mandatory summer practical training in the two University forests and forest services provides ELTS and integrates theory and practical skills.
- The two-month optional (incorporating transparent student selection ranking) internship/practical training (Πρακτική Άσκηση ΕΣΠΑ) is an important part of the curriculum.
- The DFNE website is well structured, user-friendly and provides the necessary information regarding the academic unit and the study programme with up-to-date information. However, the web design is slightly outdated.
- Considering recommendations made by the 2012 External Evaluation Committee, the DFNE introduced a first semester course titled “Introduction to Forestry Science” and reduced the numbers of courses in the updated programme required for graduation.
- The two University forests (Pertouli-Pindos and Taxiarchis-Chalkidiki) are very important assets for the DFNE providing valuable research opportunities, practical educational training and outreach activities.

II. Areas of Weakness

- Diverse background in natural sciences (mainly in biology) and low admission threshold for newly admitted students.
- Relatively low student attendance in theoretical courses. Low student participation in departmental and course evaluations/surveys.
- Lack of staff first aid training and emergency response procedures/training/drill.
- Cases of outdated textbooks offered as study references to students. Many textbooks are more than 10 years old; a few are older than the students.

III. Recommendations for Follow-up Actions

Addressed to DFNE

- The next study programme revision should consider:
 - Targeted comparisons of the design and curriculum with high-quality/renown European and international programmes and universities.
 - Further strengthen the established links between research and teaching by regularly updating course contents and providing additional experiential learning to students.
 - Consider awarding one ECTS to 25 student workload hours instead of 30.
 - Homogenise the descriptions of the learning outcomes within the course frameworks (syllabi).
 - Enrich the methods of student assessment in the courses and clearly communicate those in the curriculum.
 - Include more soft skills training and greater experiential learning opportunities.
 - Re-enforce the involvement of external/guest lecturers on specialized scientific topics towards co-teaching, via virtual engagement/instruction where feasible and applicable.
 - Strengthen consultations with stakeholders and public or private sectors experts. Consider establishing an external advisory board to engage with the Department.
 - Increase students' participation and confidence in course and internal evaluations (investigate and test alternative ways, including tangible incentives).
 - Seriously consider further reduction in the number of courses by fusion/merging of courses that show significant overlap and transforming them to more interdisciplinary ones or by elimination of obsolete ones or by shrinking those containing loaded syllabi. Specific attention should be given to contemporary practical applications (e.g. Forest Cadastre implementation in Greece, basic data analysis and programming skills in an object-oriented language such as R or Python with emphasis on geospatial analysis), as well as the ability to manage and take preventive measures in combating climate change, and the ability to manage grazing areas. Ensure that at graduation time all students can complete and articulate to co-workers and the public a management plan for a compartment, forest or watershed autonomously (unaided).
- Publish all (current and past) Internal Evaluation Reports by OMEA on the DFNE website. This will further promote transparency and emphasize needed improvements.
- Review and update the 5-year Departmental Strategic Plan with specific, quantitative goals and measurable outcomes for the undergraduate programme. Review the Strategic Plan annually.
- Envision periodic regular reforms of the undergraduate study programme on a 3–5-year basis.
- The DFNE must develop a framework for and an implementation plan to increase graduation rates.
- Establish an annual review and an internal audit of the quality assurance system of the undergraduate programme.

- Increase the involvement of student representatives in procedures aiming at improving the undergraduate study programme.
- Enhance the role and duties of the Academic Advisor and timely communicate developments to the students.
- Further improve the methods of course delivery.
- Consider annual teaching awards for excellence.
- Promote the benefits emerging from student international mobility (ERASMUS+).
- Increase resources available to laboratories by continuous and diligent pursuit of external grants and co-production opportunities via research proposal submission and networking, to ensure that students are adequately exposed to modern technologies and have updated technical skills.
- Recognize and highlight faculty and student successes and create press releases on the Department website.
- Partner with other Greek and international universities on the delivery of online virtual courses to increase efficiency, improve faculty productivity, and broaden the students' experiences.
- Strengthen the research seminar programme, invite national and international scholars/leaders from the private and public sectors/NGOs and involve students at all levels and from all programmes.
- Support and facilitate project/grant training activities for faculty.
- Encourage and support the professional development activities of faculty, staff and students. This includes but is not limited to international professional meetings, seminars, and full or mini-sabbaticals.
- Further lobby and sustain efforts to increase the number of students who participate in the two-month internship/practical training (Πρακτική Άσκηση ΕΣΠΑ) opportunities.
- Increase the quantity, quality and statistical representativeness of the graduate career path records via tighter collaboration with the Geotechnical Chamber of Greece and other relevant professional associations; make these statistical outcomes easily accessible in the DFNE website.
- Further increase outreach activities.
- Further reinforce participation and initiate education projects on climate change impacts, adaptation and mitigation.
- Invest (both DFNE and MODIP) in a more in-depth evaluation of the information provided in the course evaluation surveys and explore multivariate analyses instead of metrics of central tendency.
- Explicate and publicize annually how the information content of student satisfaction surveys is used.
- The DFNE website should:
 - Contain all available data on student, faculty, and external evaluations in a form that is easily interpretable, instead of sporadic and often esoteric references to MODIP and AUTH sites.
 - Contain templates for coursework and relevant information, as well as for faculty Curricula Vitae, complete with cross referencing and update times.

- Disseminate via its web portal information on student mobility, participation in international programmes, frequency and origin of visiting students and scholars. Also, improve its presence in established and emerging social platforms.
- Increase outreach by developing and managing a site for alumni and publish information that targets this group specifically; including relevant information on the DFNE strategic initiatives, faculty research distinctions and awards, and upcoming seminars; publishing opportunities for visits and engagement with the undergraduate program; including job opportunities in the DFNE for both faculty and administrative other support staff recruitment efforts.

Addressed to AUTH

- Provide (or expedite the establishment of) specialised seminars or courses on academic pedagogics, meeting also the needs for disabled and special needs students.
- Invest (both DFNE and MODIP) in a more in-depth evaluation of the information provided in the course evaluation surveys and explore multivariate analyses instead of metrics of central tendency.
- Provide first aid training and emergency response procedures and drills.
- The facilities and resources in the DFNE seem adequate. If, however, the Department aspires to become the epicentre for addressing the role of forestry in mitigation of and adaptation to climate change, serious upgrades must be budgeted and implemented. This also requires major revisions to the undergraduate program.

Addressed to the State Authorities

- Urgently:
 - ✓ Reduce the number of incoming students to further increase the quality of the study programme. The rates observed since the last external evaluation are unsustainable.
 - ✓ Increase both the funding and the amount of student compensation for the optional practical training.
 - ✓ Increase funding to attract and support external/guest lecturers.

IV. Summary & Overall Assessment

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

The Principles where substantial compliance has been achieved are: **2, 3, 8, and 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 External Evaluation & Accreditation Panel agrees that this Programme leads to a Level 7 Qualification according to the National & European Qualifications Network (Integrated Master) | YES | NO |
| | X | |

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

1. Prof. Filippos Tsikalas (Chair)

University of Oslo, Norway

2. Prof. Tala Awada

University of Nebraska-Lincoln, USA

3. Dr. Demetrios Gatziolis

USDA Forest Service, Pacific Northwest Research Station, USA

4. Dr. Rigas Giannopoulos

Member of the Geotechnical Chamber of Greece, Greece