



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ  
HELLENIC REPUBLIC



Εθνική Αρχή  
Ανώτατης Εκπαίδευσης  
Hellenic Authority  
for Higher Education

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Αθήνα, 18/10/2024

Αρ. πρωτ.: 46566

## ΑΠΟΦΑΣΗ ΠΙΣΤΟΠΟΙΗΣΗΣ

### Το Συμβούλιο Αξιολόγησης και Πιστοποίησης της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ)

Έχοντας υπόψη:

1. Τις διατάξεις του Ν. 4653/2020 (ΦΕΚ 12/Α'/24-01-2020) «Εθνική Αρχή Ανώτατης Εκπαίδευσης. Ειδικοί Λογαριασμοί Κονδυλίων Έρευνας Ανώτατων Εκπαιδευτικών Ιδρυμάτων, Ερευνητικών και Τεχνολογικών Φορέων και άλλες Διατάξεις», όπως ισχύει.
2. Την υπ' αριθμ. 18135/Ζ1/7-2-2020 Απόφαση της Υπουργού Παιδείας και Θρησκευμάτων (ΦΕΚ 94/τεύχος ΥΟΔΔ/7-2-2020), περί διορισμού του Προέδρου του Ανώτατου Συμβουλίου της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ), την υπ' αριθμ. 16384/Ζ1/15.02.2024 απόφαση του Υπουργού Παιδείας, Θρησκευμάτων και Αθλητισμού (ΦΕΚ 137/τ. ΥΟΔΔ/19-02-2024), περί παράτασης της θητείας του Προέδρου του Ανώτατου Συμβουλίου της ΕΘΑΑΕ, καθώς και την υπ' αριθμ. 88986/Ζ1/1.08.2024 απόφαση του Υπουργού Παιδείας, Θρησκευμάτων και Αθλητισμού (ΦΕΚ 846/Υ.Ο.Δ.Δ/7.8.2024) περί της ανανέωσης της θητείας του Προέδρου του Ανώτατου Συμβουλίου της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ).
3. Την υπ' αριθμ. 15650/23-04-2020 Απόφαση του Προέδρου της ΕΘΑΑΕ (ΦΕΚ 329/τ. ΥΟΔΔ/04-05-2020) «Ορισμός των μελών του Συμβουλίου Αξιολόγησης και Πιστοποίησης (ΣΑΠ) της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ)», όπως ισχύει.
4. Την υπ' αριθμ. 43881/03-07-2024 Έκθεση Πιστοποίησης της Επιτροπής Εξωτερικής Αξιολόγησης & Πιστοποίησης του ΠΜΣ Τοξικολογία του Τμήματος Βιοχημείας και Βιοτεχνολογίας του Πανεπιστημίου Θεσσαλίας.
5. Την 41η/24-7-2024 συνεδρίαση του Συμβουλίου Αξιολόγησης και Πιστοποίησης, θέμα θέμα 2 «Έγκριση εκθέσεων πιστοποίησης ΠΜΣ – Χορήγηση πιστοποίησης».

### ΠΙΣΤΟΠΟΙΕΙ ΟΤΙ

το Πρόγραμμα Μεταπτυχιακών Σπουδών

Τοξικολογία

του Τμήματος Βιοχημείας και Βιοτεχνολογίας  
του Πανεπιστημίου Θεσσαλίας

συμμορφώνεται πλήρως με τις αρχές του Προτύπου Ποιότητας για την Πιστοποίηση των Προγραμμάτων Μεταπτυχιακών Σπουδών της ΕΘΑΑΕ και τις Αρχές και Κατευθυντήριες Οδηγίες για τη Διασφάλιση Ποιότητας στον Ευρωπαϊκό Χώρο Ανώτατης Εκπαίδευσης (ESG), για το επίπεδο σπουδών 7 του Εθνικού και Ευρωπαϊκού Πλαισίου Προσόντων.

Η διάρκεια ισχύος της πιστοποίησης ορίζεται για πέντε έτη, από 24-7-2024 έως 23-7-2029.



Ο Πρόεδρος της ΕΘΑΑΕ

Καθηγητής Περικλής Α. Μήτκας



Με τη συγχρηματοδότηση  
της Ευρωπαϊκής Ένωσης



Πρόγραμμα  
Ανθρώπινο Δυναμικό και  
Κοινωνική Συνοχή





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# **Accreditation Report** **for the Postgraduate Study Programme of:**

## **Toxicology**

**Department: Biochemistry and Biotechnology**

**Institution: University of Thessaly**

**Date: 20 May 2024**



Με τη συγχρηματοδότηση  
της Ευρωπαϊκής Ένωσης



Πρόγραμμα  
Ανθρώπινο Δυναμικό και  
Κοινωνική Συνοχή



Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of **Toxicology** of the **University of Thessaly** for the purposes of granting accreditation

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## **PART A: BACKGROUND AND CONTEXT OF THE REVIEW**

### **I. The External Evaluation & Accreditation Panel**

The Panel responsible for the Accreditation Review of the postgraduate study programme of **Toxicology** of the **University of Thessaly** comprised the following five (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Nikolaos Venizelos, (Chair)**  
Örebro University, Örebro, Sweden
- 2. Prof. Evangelos Dedousis**  
American University in Dubai, Dubai, United Arab Emirates
- 3. Prof. Panagiotis Soultanas**  
University of Nottingham, Nottingham, United Kingdom
- 4. Ms. Zoi-Lina Koutsogianni, PhD Candidate**  
Aristotle University of Thessaloniki, Thessaloniki, Greece

## II. Review Procedure and Documentation

In accordance with the requirements of Quality Assurance in Higher Education (laws 4009/2011 & 4653/2020), the Authority of Higher Education (**HAHE**), by individual invitation and after formal acceptance dated 10/5/2024, establishes an independent External Accreditation Panel (**EEAP**), with the mission to assessing the compliance of the Postgraduate Studies Program (**PSP**) in **Toxicology** of the Department of Biochemistry and Biotechnology (**DBB**) of the School of Health Sciences of the University of Thessaly, scheduled 20–25/05/2024. The established EEAP consists of four experts (4), three from universities abroad and one from Greek University.

The evaluation was carried out through reviews of documents, as well as online interviews with Directors of PSP, the Head of the Department, MODIP members, Steering Committees, OMEA members, teaching staff, students, graduates, and external stakeholders. The method used was focusing on the sampling of the activities of the Department and aimed at assessing the fulfilment of the requirements according to the protocol of HAHE, regarding the Quality of the PSP and compliance, its effectiveness, and implementation within the scope of the requirements. All information and documents provided by the Department was considered by the EEAP to be factually correct.

On May 12, 2024, the EEAP Got access to all supporting documents via HAHE web-based Panel-Accreditations System.

### Materials provided by the Department

- A0. Contents
- A1. Proposal of Academic Accreditation
- A2. Quality Policy of Postgraduate Study Programme
- A3. Quality Objectives of the Academic Unit for the Postgraduate programmes
- A4. Senate Decision on the Establishment of PSP
- A5. Study Guide
- A6. Course Outline
- A7. List of names of teaching staff
- A8. Report of the internal evaluation
- A9. Evaluation from students
- A10. Regulation on complaints handling
- A11. Operating rules of the academic adviser institution
- A12. Internal rules of procedure of PSP
- A13. Research ethics regulations
- A14. Study Regulations
- A15. Diploma Annex
- A16. Summary report on teaching staff allowances
- A17. Indicators, Quality Data Management System - Institution Report 2017-2022
- A18. External evaluation of the postgraduate programme
- A19. Other documentation material

### Materials provided by HAHE

Acronyms, PSP-Guidelines for the EEAP, European Qualifications Framework, Standards PSP En., M12 PSP Mapping Grid, Accreditation Management System - expert manual, M13 PSP

Accreditation Report Template, Guidelines of Accreditation-En.,. MN6 NEW PSP Guidelines for the EEAP, MN1 Standards NEW PSP EN, MN12 NEW PSP MAPPING GRID

The whole accreditation process was carried out solely remotely using the Zoom platform. All the accreditation reviews were scheduled and performed at Greek time zone.

Monday, 20/05/2024, 15:00 - 16:00 hrs.

The EEAP members met remotely in view of getting know each other and to establishing a modus operandi regarding the accreditation mission, to schedule and discuss the content and structure of the Report Template, allocation of tasks, for to be prepared ahead of the site visit that would be performed via online using Zoom platform.

Same day, at 16:00 - 17:00 hrs., the EEAP started formally the evaluation reviews of the PSP program in Toxicologi. In the first part of this virtual meeting, the EEAP met the Head of the Department also Director of the PSP in Toxicology Prof. Dimitrios Karpouzas and the members of the Steering Committee of Toxicology, Prof. Konstantinos Mathiopoulos, and Assoc. Prof. Dimitrios Stagos.

The Head of Department Prof. Dimitrios Karpouzas briefly presented the Department of Biochemistry and Biotechnology (DBB), the establishing history, physiognomy, teaching, administrative staff, facilities, courses, and milestones, and as Director of the PSP in Toxicology continued to briefly present the origins, current status, strengths, possible problem areas and various aspects of compliance with the accreditation principles of the Toxicology PSP Programme.

Present during this meeting, were Prof. Ioannis Anagnostopoulos, Vice-Rector of Administrative and Academic Affairs, Prof. Dimosthenis A. Sarigiannis, NHRF Director and Chairman of the Board, and the MODIP staff/members, Prof. Theodoros Metaxas MODIP member, Ms Eleni Tsironi MODIP Coordinator, Ms Dimitra Manou MODIP staff and Ms Konstantina Founta MODIP staff.

Same day, at 17:00 to 17:30 hrs., was scheduled a tour of facilities by a video produced to access the classrooms, lecture halls, libraries, research laboratories, and other facilities related to the PSP.

Next after the EEAP members finished the first day sessions by a debrief meeting, to reflect on the first day impressions and to prepare the next day on-line reviews.

Wednesday, 22/05/2024, 15:00 - 15:45 hrs., the EEAP met with the teaching staff of the PSP in Toxicology, and discussed the opportunities of professional development, mobility, teaching methods, evaluation by students, and possible areas of weakness. Presenters at the meeting were:

1. Prof. Dimitrios Kouretas
2. Dr. Charitini Nepka
3. Associated Prof. Veskoukis Aristedes
4. Associate Prof. Antonios Giakountis
5. Associate Prof. Daniella Tsikou

At 16:00 hrs., the EEAP met with 7 students representants from all 3 semester of the PSP and were discussed the students' satisfaction of their study experience, the Department and Institution facilities, the students input in quality assurance of PSP, and student life and welfare.

At 17:30 hrs., the EEAP met with 6 PSP graduates; Fotios Tekos, Zoi-Vasiliki Skaperda, Periklis Vardakas, Maria-Paraskevi Nechalioti, Thomas Karampatzakis, and Maria Gasdroga. Their experience and the importance of PSP in terms of their development and career were discussed.

At 18:30 hrs., the EEAP met with employers/external stakeholders from the private sector and discussed the external relations of the PSP. Present at the meeting were: Dr. Christina Tsitsimpikou, Senior Toxicologist (General Chemical State Laboratory, and Dr. Nicholas Georgiadis, Technical qualified member of the board of Appeal – Senior scientific officer (ECHA).

Next after the EEAP members had a debriefing in private, to discuss the outcomes of the daily meetings and prepare a preliminary oral report to the closure meeting.

At 20:00 -20:30 hrs., the EEAP in a short closure meeting with the Director of the PSP and head of the Department Prof. Dimitrios Karpouzas, and the Steering Committee members of PSP in Toxicology, was finalised the scheduled PSP reviews in Toxicology by a short and informal oral report, concerning EEAPs initial impressions and key findings.

Present at the closure meeting were also the MODIP staff/members, Prof. Theodoros Metaxas MODIP member, Ms Eleni Tsironi MODIP Coordinator, Ms Dimitra Manou MODIP staff and Ms Konstantina Founta MODIP staff.

During the period 23 to 25 of May 2024, the EEAP members were getting familiar to all material send by HAHE and MODIP and worked on the completion of a draft of Accreditation Report (AR) of PSP programme.



### III. Postgraduate Study Programme Profile

The University of Thessaly (UTH) was founded in 1984 with the Presidential Decree 83/1984, which was modified in 1985 with the P.D. 302/1985 and P.D. 107/86. Volos was designated the central location of the University of Thessaly.

The University of Thessaly consists with 8 schools, 37 Departments, and 14 institutes. Is the third biggest University in Greece, with its own identity. University of Thessaly provides 110 undergraduate and postgraduate programs, and extra-curricular modules in specific research and business fields. It has more than 43.000 undergraduate students, about 4300 postgraduate students and about 1500 PhD students. It also has 1000 members of teaching and research staff and 450 members of administrative personnel. It is known for its excellent research performance and outstanding scientific achievements, in accordance with the international standards. Has excellent equipped Laboratories of the different Departments, and the Research Units have several well-trained researchers to support them.

According to its founding decree, the University of Thessaly today comprised of 8 Schools inclusive School of Health Sciences located in Larisa. By the provisions of Act 4589/2019, Article 22 (Government Gazette 13/A'), was established the Larissa General Department, addressed the educational needs of the University of Thessaly Departments, which also operates all the Postgraduate Study Programmes (PSPs) formerly delivered by the TEI of Thessaly (former T.E.I. of Larissa), to students that we admitted until the academic year 2019-20. The University of Thessaly's, School of Health Sciences Library Building, is also in BIOPOLIS, Larissa.

The School of Health Sciences in Larissa, consist of six departments, including the department of Biochemistry and Biotechnology (DBB) and operate 27 PSPs. The department of Biochemistry and Biotechnology (DBB) is in Larissa and operate 5 PSPs, inclusive the PSP in toxicology. The DBB in 2020, graduated 884 undergraduate students, 585 postgraduates, 64 PhD students.

The PSP entitled "Toxicology" was founded in 2015 (Government Gazette 441/24-03-2015, B'), and reestablished in 2018 (Government Gazette: 76047/Z1/11-05-2018), in the Department of Biochemistry and Biotechnology of the School of Health Sciences of the University of Thessaly. The PSP Toxicology aims to train high quality scientists with professional orientation in applied toxicology, and with enhanced understanding of respect for the environment, the protection of the health of the worker and the consumer. The PSP in Toxicology is the first attempt in Greece to cover at postgraduate level basic knowledge of Toxicology.

The PSP is made up of 90 ECTS, including eight required courses, worth 60 ECTS in total, plus a 30 ECTS dissertation. It takes a minimum of three academic semesters to complete.

The PSP-Toxicology, register a maximum of twenty (28) students each year. The PSPs tuition fees is total 4,000 euros.

Course structure and objectives, guides, and regulations, of the PSP "Toxicology" are stated on the website in both Greek and English. <http://pms-toxicology.bio.uth.gr/en>.

## PART B: COMPLIANCE WITH THE PRINCIPLES

### PRINCIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT

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 THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

*The quality assurance policy of the academic unit should be in line with the quality assurance policy of the Institution and must be formulated in the form of a public statement, which is implemented by all stakeholders. It focuses on the achievement of special goals related to the quality assurance of the study programmes offered by the academic unit.*

*Indicatively, 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 postgraduate study programme (PSP), its purpose and field of study; it will realise the programme's goals and it will determine the means and ways for attaining them; it will implement appropriate quality procedures, aiming at the programme's improvement.*

*In particular, in order to implement 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 postgraduate study programmes*
- b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education - level 7*
- c) the promotion of the quality and effectiveness of teaching at the PSP*
- d) the appropriateness of the qualifications of the teaching staff for the PSP*
- e) the drafting, implementation, and review of specific annual quality goals for the improvement of the PSP*
- f) the level of demand for the graduates' qualifications in the labour market*
- g) the quality of support services, such as the administrative services, the libraries and the student welfare office for the PSP*
- h) the efficient utilisation of the financial resources of the PSP that may be drawn from tuition fees*
- i) the conduct of an annual review and audit of the quality assurance system of the PSP through the cooperation of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU)*

#### **Documentation**

- Quality Assurance Policy of the PSP
- Quality goal setting of the PSP

#### **Study Programme Compliance**

##### **I. Findings**

#### **Quality Assurance Policy (QAP) of the of the Department and the PSP Toxicology.**

The PSP "Toxicology" in accordance with the provisions of § 8, article 32 of Law 4485/2017 (Government Gazette 114/t.A'), will operate until the academic year 2022-2023.

The PSP is organized and implemented by the Department of Biochemistry and Biotechnology (DBB) of the University of Thessaly (UTh) that is based in Larissa and belongs to the School of Health Sciences along with the Departments of Medicine, Veterinary Medicine, Nursing, Public and Integrative Health, and Physiotherapy of the University of Thessaly.

The PSP Toxicology in collaboration with the Quality Assurance Unit (MODIP) and the proficient services of the University of Thessaly (UTh) has harmonized the Quality Policy of the PSP with the Quality Policy of the UTh, which aims to continuous and systematic assurance, improvement, and enhancement of the quality of the study programs and supporting services of the UTh. This policy includes the formulation of clear, specific, measurable objectives and corresponding quality assurance actions, which define the framework which all academic and administrative units of the University must operate to achieve the expected results.

### **Quality Policy Statement of the PSP Toxicology**

The strategic objectives of the PSP are in accordance with the broader goals and commitments of the Department of Biochemistry and Biotechnology and the University of Thessaly and are in line with the legal and regulatory framework governing the operation of the country's Universities. The teaching and administrative staff of the PSP in Toxicology are committed to implement the Quality Policy and make a continuous effort to achieve its objectives. The commitment of the teaching and administrative staff of the PSP in Toxicology is a strategic choice of management and responsibility. The PSP in Toxicology has developed and implements a specific formal QAP, which is part of its strategy.

The mission of the PSP Toxicology is to train the students in the Science of Toxicology and its modern applications, so that its graduates are equipped with basic and specialized knowledge, laboratory experience, and other high-quality skills. The PSP is committed to providing excellent higher education to its students but also to the effort to develop a creative research and work environment for its staff.

The vision of the PSP Toxicology is to serve educational, research, cultural and wider social goals, constituting one of the pillars of excellence of the University of Thessaly in the fields of education and research, with dedication to the principles of scientific ethics, sustainable development, and social contribution, while emphasizing on internationalization of students, exploitation of research results and promotion of students' research work, as well as teaching and learning innovation.

The statement of quality policy of the PSP in Toxicology of the DBB of the University of Thessaly has been unanimously approved by the minutes of Assembly of the Department, upon the recommendation of the Coordinating Committee.

### **Implementation of Quality Policy (QP)**

The DBB of the University of Thessaly is committed to implementing a quality assurance policy that supports its academic profile as a department that offers comprehensive training of Biochemists-Biotechnologists and other Bioscientists through high-level first, second and third cycle study programs, with emphasis on modern computational skills and laboratory methods.

Further the DBB ensures the orientation of all the programmes of study it offers and promotes the training of Biochemists-Biotechnologists and other Life Scientists so that they can cope

with the demands and challenges of the Greek, European and International labour market as well as research and development.

The quality assurance policy of the DBB is in line with the quality assurance policy of the University of Thessaly, which aims to develop a culture of quality within the academic community so that it can fulfil its objectives through education, excellence, promotion of knowledge and innovation in research. It follows the principles and guidelines for Quality Assurance in the European Higher Education Area, in accordance with the European Union Declaration on Quality Assurance in Higher Education Helsinki (ENQUA 2009).

### **Objectives and actions to ensure Quality Policy**

1. Designs, modifies, and improves the curriculum with transparency and participation of stakeholders -in accordance with current legislation
2. Promotes the quality and effectiveness of teaching work
3. Ensures the quality of the research work of the members of the academic unit
4. It is informed about the level of professional rehabilitation of graduates, about the labour requirements per field of employment and disseminates to students the necessary information. In addition, it conducts an annual job rehabilitation survey through approved polling companies to ensure valid data.
5. Ensures the appropriate number of students (according to teaching staff and logistical infrastructure) to be able to offer high quality education.
6. Care for continuous upgrading of administrative procedures, improvement of its infrastructure and services, prioritizing the student community.
7. Improving student performance and performance.
8. The development of collaborations with other institutions abroad and domestically.
9. Ensures the updating and quality of the website of the MSc in Toxicology, so that it is a constantly valid source of information for students.

### **The strategy of the PSP in line with Institution**

The strategy of the PSP in Toxicology is in line with the strategy of the institution and focuses on the following axes: the design, modification, and improvement of the curriculum with transparency and participation of stakeholders, the promotion of the quality and effectiveness of the teaching work and the care for the quality of the research work of the members of the academic unit.

The design strategy of the PSP curriculum is inextricably linked to the strategy and updated objectives of the University of Thessaly (Decision of the Rector's Council, meeting 168/12-10-2021). The DBB promotes its purpose and implements its strategic objectives within the framework of the Strategic Planning of the University of Thessaly, determines the means and ways of achieving them and applies appropriate quality procedures to ensure its continuous improvement.

The Postgraduate Program, for the implementation of its objectives, discusses the results of the evaluation by the students, utilizes the findings and proposals of the Coordinating Committee, as well as the decisions of the General Assembly of the Department to design and

initiate beneficial changes in the PSP. In addition, the academic teaching staff, as well as the guest speakers, participate and monitor through their continuous research the evolution of the cognitive subjects and submit proposals for continuous improvement.

### **Quality goal setting of the PSP Toxicology**

The PSP entitled "Toxicology" was founded in 2015 (Government Gazette 441/24-03-2015, B'), and reestablished in 2018 (Government Gazette: 76047/Z1/11-05-2018), in the Department of Biochemistry and Biotechnology of the School of Health Sciences of the University of Thessaly (UTh) and will operate in 2018-19.

The PSP Toxicology aims to train high quality scientists with professional orientation in applied toxicology, and with enhanced understanding of respect for the environment, the protection of the health of the worker and the consumer. It is the first attempt in Greece to cover at postgraduate level basic knowledge of Toxicology.

The subject of the PSP is shaped by modern challenges as its subject Toxicology, as an interdisciplinary discipline, draws knowledge from analytical chemistry, biochemistry, physiology, molecular biology, pharmacology. While its findings are applicable in nutrition and medicine, also in the chemical and pharmaceutical industry, and industry of cosmetics and food. Toxicology is divided into human health toxicology, occupational toxicology, and environmental toxicology. At European level, the relevant legislative framework is particularly strict.

The PSP in Toxicology is harmonized and applied the European Credit System (ECTS) and to obtain a degree the candidate must complete 90 ECTS. The total number of ECTS is distributed as follows: 60 ECTS courses and 30 ECTS diploma thesis. The program includes 8 courses, practical training, and a dissertation. In addition, the compulsory curriculum is enriched with participation in relevant conferences and invited visiting lecturer, who are distinguished in the field of subjects that dealt with by the PSP in Toxicology. Students are encouraged to apply for ERASMUS mobility programmes.

To obtain the Postgraduate Diploma (M.Sc. in Toxicology), the students are required to compulsorily attend and be successfully examined in all courses (lectures and workshops) of totally 60 ECTS and complete a postgraduate thesis of 30 ECTS. The language of tuition is Greek or if there are interested parties in English. The dissertation is Greek, it can also be English. PSP Toxicology has a duration of three academic semesters and as shown by the detailed descriptions of the courses, complies with the guidelines of the National Qualifications Framework (NQF) for level 7 of the thematic areas of Biotechnology (ISCED: 0512) and Biology (ISCED: 0511).

The graduates of PSP are awarded an MSc degree in Toxicology and are equipped with the scientific knowledge and specialization in the broader field of Toxicology, so that they can pursue a successful career in all branches of the chemical industry, as they will have received

comprehensive knowledge of the European legislative framework on Toxicology, as well as practical innovative applications in products and services, making them valuable human resources for the industrial sector.

The present PSP program is set under the auspices of the Hellenic Society of Toxicology.

In addition, this master programme provides some of the minimum requirements in education for European Registered Toxicologist (ERT). Therefore, graduates could apply in due time for the title of ERT, depending on the rules and regulations of EUROTOX and the HST.

Study guide of the current for academic year (2022-2023) of the M.Sc. In Toxicology, is described in detail in Annex A5 and on the website in both Greek and English. <http://pms-toxicology.bio.uth.gr/en> .

### **Teaching facilities**

The IPSP-Toxicology, in 2022-2023 accommodated a maximum twenty (28) students. The PSPs tuition fees is total 4,000. (1500 euros for the first and second semester and 1000 euros for the third semester).

A total of 30 teachers (9 Professors, 5 Associate Professors, 5 Assistant Professors, 2 Laboratory Teaching Staff and 9 External Collaborators) are reported to be actively involved in the teaching of the PSP.

An Academic Advisor is appointed for each student of the PSP, who is also member of the teaching staff. At the same time, students have also access to the counselling services of the University. Specifically, the Student support Counselling Service of the Laboratory of Psychology and Applications in Education of the University of Thessaly, which operates in Larissa with 8 specialized external partners, assists in the training of acquiring management skills and solving potential problems.

The lectures take place in lecture halls/rooms of the Department of Biochemistry and Biotechnology (DBB) of the School of Health Sciences of the University of Thessaly, and the laboratory exercises are carried out in the Laboratory of Physiology of Animal Organisms, the Laboratory of Microbial Biotechnology – Molecular Bacteriology – Virology, the Laboratory of Organic Chemistry, and in the Laboratory of Pharmacology. The laboratories are equipped with modern laboratory equipment that ensures the desired learning outcomes for students (for more details see A8.1)

The PSP Toxicology offers Web information to students about “Course structure and objectives, Guides and Regulations”, stated on the website in both Greek and English. <http://pms-toxicology.bio.uth.gr/en>.

### **Synergies with external stakeholder**

Student mobility is ensured by the possibility of receiving annual scholarships for work at the European Authorities ESFA and ECHA. The DBB cooperates also with foreign institutions within the framework of the Erasmus+ program for student exchange. Students participating in mobility financed only from Erasmus+ funds.

The Institution and the Department, exhibit having established several research collaborations with external academic stakeholders linked to the PSP level.

## **II. Analysis**

The quality assurance policy of the DBB is in line with the quality assurance policy of the University of Thessaly and is formulated in the form of a public statement.

The QAP statement of the Department includes commitments that implement a quality policy to promote the academic profile, the orientation of the PSP Toxicology, and the purpose and field of study.

The statement of quality policy of the PSP in Toxicology of the DBB of the University of Thessaly has been unanimously approved by the Assembly of the Department, upon the recommendation of the Coordinating Committee.

There is clear evidence of continuous improvement of the PSP and a quality policy that supports the academic profile and orientation of the PSP, the students, and the participating teaching and administrative staff.

The department continuously monitors the quality assurance development, by collecting data related to quality assurance and then analysing the collected data.

The PSP is unique among universities in Greece, while it is the first attempt in Greece to cover basic knowledge of Toxicology at postgraduate level.

The PSP seem to have sufficient resources, both specialized human resources and teaching and laboratory facilities for to operate the PSP in Toxicology

The PSP provides clearly stated also on the PSP website in both Greek and English the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education for level 7 of the thematic areas of Toxicology.

## **III. Conclusions**

The panel considers that the academic unit and the PSP approach the requirements and commitments required for the implementation of the adequate education quality policy in accordance with HAHEs regulation. It is also fully in line with the departments and institutions quality assurance policy and the quality objectives for to operate the PSP in Toxicology.

## Panel Judgement

Principle 1: Quality assurance policy and quality goal setting for the postgraduate study programmes of the institution and the academic unit	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

## Panel Recommendations

- More activities with the labour market.
- Improvement of external extroversion.
- The statement of quality policy of the PSP in Toxicology should be also stated on the website as well.



## PRINCIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD DEVELOP THEIR POSTGRADUATE STUDY PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE POSTGRADUATE STUDY PROGRAMMES. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES AND THE EMPLOYMENT PROSPECTS ARE SET OUT IN THE PROGRAMME DESIGN. DURING THE IMPLEMENTATION OF THE POSTGRADUATE STUDY PROGRAMMES, THE DEGREE OF ACHIEVEMENT OF THE LEARNING OUTCOMES SHOULD BE ASSESSED. THE ABOVE DETAILS, AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

*The academic units develop their postgraduate study programmes following a well-defined procedure. The academic profile and orientation of the programme, the research character, the scientific objectives, the specific subject areas, and specialisations are described at this stage.*

*The structure, content and organisation of courses and teaching methods should be oriented towards deepening knowledge and acquiring the corresponding skills to apply the said knowledge (e.g. course on research methodology, participation in research projects, thesis with a research component).*

*The expected learning outcomes must be determined based on the European and National Qualifications Framework (EQF, NQF), and the Dublin Descriptors for level 7. During the implementation of the programme, the degree of achievement of the expected learning outcomes and the feedback of the learning process must be assessed with the appropriate tools. For each learning outcome that is designed and made public, it is necessary that its evaluation criteria are also designed and made public.*

*In addition, the design of PSP must consider:*

- *the Institutional strategy*
- *the active involvement of students*
- *the experience of external stakeholders from the labour market*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS) for level 7*
- *the option of providing work experience to students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the PSP by the Institution*

*The procedure of approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Institution's Quality Assurance Unit (QAU).*

### **Documentation**

- *Senate decision for the establishment of the PSP*
- *PSP curriculum structure: courses, course categories, ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities*
- *Labour market data regarding the employment of graduates, international experience in a relevant scientific field*
- *PSP Student Guide*
- *Course and thesis outlines*
- *Teaching staff (name list including of areas of specialisation, its relation to the courses taught, employment relationship, and teaching assignment in hours as well as other teaching commitments in hours)*

## **Study Programme Compliance**

### **I. Findings**

Following the Senate's decision in 2018, the PSP in Toxicology was re-established. The PSP is made up of 90 ECTS, including eight required courses, worth 60 ECTS in total, plus a 30 ECTS dissertation, and it takes a minimum of three academic semesters to complete. The objective of the PSP is to train high calibre scientists professionally oriented to applied toxicology who have a heightened sense of respect for the environment and safeguard the health of working people and consumers. Graduates of the PSP are awarded a Diploma of Graduate Studies in Toxicology and are equipped with the knowledge regarding the European legal framework on toxicology and its innovative applications to products and services. Thus, graduates become valuable human assets in the industry. The PSP is the first of its kind in Greece and among five other similar programs in Europe.

The learning process includes lectures, tutorials, the study of international literature, laboratory assignments, and a dissertation thesis thus providing students with a solid theoretical background coupled with practical knowledge, and skills required to advance their career in the industry. Current and former students expressed satisfaction and made positive comments about the PSP during discussions with the EEAP. This is in line with the results of student evaluation surveys, for the academic year 2021-2022, showing overall satisfaction 4.11/5 and 4.31 for the Spring and Fall semester respectively.

The structure of the PSP is rational and clearly articulated and in accordance with the ECTS system. The combination of coursework and dissertation, counting for 67% and 33% of the PSP respectively, aims at imparting up-to-dated and highly specialized knowledge and developing a range of skills to graduates at level-7. Detailed information regarding admission and graduation requirements, course contents, lecture outlines, teaching/learning methods, expected learning outcomes and skills, student evaluation, assessment items, required and recommended bibliography, infrastructure, and other relevant material, that students need to know about, is available in the study guide and individual course outlines. Drawing on the last two documents and the full list of teaching faculty by name, affiliation, academic specialization, and employment relationship, the close relationship between the faculty's academic specialization and courses taught can be established.

### **II. Analysis**

The PSP in Toxicology is an innovative program that offers a high value-added specialization in the area. There is strong demand for the program evidenced by the high employment rate for graduates. One comment may be made regarding bibliography included in course syllabi. In a few courses the recommended bibliography includes material that dates to 15-20 years.

### **III. Conclusions**

The PSP prepares much-sought after highly qualified graduates in the cognate areas who are employed in the private and public sectors. The EEAP has found the PSP to be fully compliant with Principle 2.

## Panel Judgement

Principle 2: Design and approval of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

## Panel Recommendations

Up-to-date bibliography as appropriate.

### PRINCIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT

INSTITUTIONS SHOULD ENSURE THAT POSTGRADUATE STUDY PROGRAMMES PROVIDE THE NECESSARY CONDITIONS TO ENCOURAGE STUDENTS TO TAKE AN ACTIVE ROLE IN THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

*Student-centred learning and teaching plays an important role in enhancing students' motivation, their self-evaluation, and their active participation 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 by adopting 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*
- *strengthens 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 the students' complaints*
- *provides counselling and guidance for the preparation of the thesis*

*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.*
- *Assessment is consistent, fairly applied to all students and conducted in accordance with the stated procedures.*
- *A formal procedure for student appeals is in place.*
- *The function of the academic advisor runs smoothly.*

#### **Documentation**

- *Sample of a fully completed questionnaire for the evaluation of the PSP by the students*
- *Regulations for dealing with students' complaints and appeals*
- *Regulation for the function of academic advisor*
- *Reference to the teaching modes and assessment methods*

### **Study Programme Compliance**

#### **I. Findings**

The PSP Toxicology is a three academic semesters program and is primarily addressed to graduates of biology, biochemistry, chemistry, and related departments. To be awarded the diploma, students must successfully complete eight courses and a thesis project during the last semester.

The PSP implements a student-centred approach, creating a culture of mutual respect. This approach successfully supports new students, creating a welcoming and engaging learning environment. The EEAP Panel has noted a dynamic and mutually beneficial relationship between students and faculty members.

The PSP offers students ways for course evaluation, through MODIP's survey as well as through questionnaires given by teaching staff in a semester-base and filled by students anonymously. In both cases, students can assess the courses, instructors, and lecture content.

Examination procedures are announced to the students at the beginning of each course. In addition, students are allowed to write their thesis in English.

## **II. Analysis**

The curriculum of this PSP includes a wide range of courses in the field of Toxicology. The students and graduates receive high quality education from a diverse body of accomplished teaching staff that consists of DEP members, researchers, and stakeholders from national and European organizations such as ECHA and EFSA.

Current students and graduates have expressed their satisfaction with the high-quality education provided. In addition, they noted that a additions in coursed related to fields such as genotoxicity or drug toxicity would further enhance their knowledge

The participation of students' to MODIP survey for evaluation of the courses is limited to 22%. However, teaching staff provides the choice of internal evaluation through questionnaires that have better results regarding student's participation. Academic staff was aware of the progress of the whole PSP, and this was also communicated to the EEA Panel members during the meetings with students and graduates. Academic staff takes into consideration all comments and requests made by students and stakeholders, in the framework of the PSP's internal evaluation, with respect to the curriculum and proceeds to adjustments when needed.

During the meeting with social partners of the PSP, they expressed their satisfaction and enthusiasm about the scientific knowledge and practical experience that students earn through their studies.

## **III. Conclusions**

The curriculum of this PSP is in line with the standards of the HAHE, as it is of high quality. The EEA Panel finds that the PSP is fully compliant with Principle 3.

## Panel Judgement

Principle 3: Student-centred learning, teaching, and assessment	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

## Panel Recommendations

PSP should act to enhance the extroversion and interaction with industry and stakeholders.

## **PRINCIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND CERTIFICATION.**

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

*All the issues from the beginning to the end of studies should be governed by the internal regulations of the academic units. Indicatively:*

- *the student admission procedures and the required supporting documents*
- *student rights and obligations, and monitoring of student progression*
- *internship issues, if applicable, and granting of scholarships*
- *the procedures and terms for the drafting of assignments and the thesis*
- *the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and for the assurance of the progress of students in their studies*
- *the terms and conditions for enhancing student mobility*

*All the above must be made public in the context of the Student Guide.*

### **Documentation**

- *Internal regulation for the operation of the Postgraduate Study Programme*
- *Research Ethics Regulation*
- *Regulation of studies, internship, mobility, and student assignments*
- *Degree certificate template*

## **Study Programme Compliance**

### **I. Findings**

Student admission for the PSP is restricted to a maximum of 28 per year and eligible for admission are graduates of Chemistry, Biology, etc. Students' number is restricted upon a selection procedure based on the studies scores, scientific activity, knowledge of foreign languages, work experience, followed by candidates' interviews by an already established academic committee. The duration of the PSP is three academic semesters, and the maximum duration of studies is six semesters.

All procedures for student selection are clearly described in the required supporting documents. Documents also contain information for the student rights and obligations. Research ethics regulation, regulation of studies, mobility and student assignments are also provided.

The meeting of the EEA Panel with students and graduates of the PSP left a very positive impression of the utility of this PSP. All of them were very enthusiastic and positive concerning their experience and knowledge received. The procedures and terms for the drafting of assignments and the thesis are communicated in advance and well described to students. Student mobility by means of the Erasmus+ is available and communicated to the students.

### **II. Analysis**

Teaching staff of the PSP show understanding and flexibility for students that are working or having specific needs (e.g., military service, health problems).

Student mobility by means of the Erasmus+ is available and communicated to the students, and it is evident that students have actively participated. The communication between the students and the faculty members of the PSP is excellent. Faculty is constantly available in helping the students and provide all necessary information. Progress of the PSP students and of PSP graduate's professional career is followed closely by the teaching staff of the PSP.

It is remarkable that 70-80% of students conduct a research-oriented thesis project. Students and graduates were satisfied by the practical training and experience they earn through their thesis project. The PSP teaching staff allow to students to be involved in research activities, writing and submitting research articles, participating to national and international conferences. These actions help students to further develop and acquire skills.

The PSP shows a high level of employability (<80%), while a considerable number of students continue their studies to further develop by pursuing a PhD degree.

### III. Conclusions

The EEA Panel finds that the PSP is fully compliant with Principle 4.

#### Panel Judgement

Principle 4: Student admission, progression, recognition of postgraduate studies and certification	
Fully compliant	x
Substantially compliant	
Partially compliant	
Non-compliant	

#### Panel Recommendations

To further enhance adherence to Principle 4, the panel recommends the following:

Teaching staff and social partners should try to reduce the average duration of studies to 3 semesters.



## PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES

**INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE LEVEL OF KNOWLEDGE AND SKILLS OF THEIR TEACHING STAFF, AND APPLY FAIR AND TRANSPARENT PROCESSES FOR THEIR RECRUITMENT, TRAINING AND FURTHER DEVELOPMENT.**

*The Institution should attend to the adequacy of the teaching staff of the academic unit teaching at the PSP, the appropriate staff-student ratio, the appropriate staff categories, the appropriate subject areas, the fair and objective recruitment process, the high research performance, the training- development, the staff development policy (including participation in mobility schemes, conferences, and educational leaves-as mandated by law).*

*More specifically, the academic unit should set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff for the PSP 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 (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.*

### **Documentation**

- Procedures and criteria for teaching staff recruitment
- Employment regulations or contracts, and obligations of the teaching staff
- Policy for staff support and development
- Individual performance of the teaching staff in scientific-research and teaching work, based on internationally recognised systems of scientific evaluation (e.g. Google Scholar, Scopus, etc.)
- List of teaching staff including subject areas, employment relationship, Institution of origin, Department of origin

## **Study Programme Compliance**

### **I. Findings**

The PSP benefits from a 30 strong staff including 9 external contributors from the National Kapodistrian University, the Aristotle University of Thessaloniki, the University of Patras, the University of Crete, Benakeio Phytopathology Institute, the National Institute of Research and others. Staff are highly trained and specialised in their respective teaching areas, aligning with the PSP's aims and mission.

The selection process for teaching staff appears to be based on meritocratic and transparent criteria, emphasizing excellence and scientific adequacy, with specialization in the relevant subject area being a primary criterion. The PSP appears to be committed to excellence in recruitment, training, and development and this ensures a certain level of quality assurance.

The PSP supports continuous personal training and development of staff mainly through the newly established Teaching and Learning Support Centre (KEDIMA). The PSP appears to encourage scholarly activity, as well as innovation in teaching methods, and the use of new technologies, although these were not made explicit and clear, enhancing the link between education and research. Specific policies regarding staff development, mobility schemes, and educational leaves could be further elaborated for clarity. Furthermore, it is not clear whether

external teaching contributors possess the necessary teaching/educational qualifications and/or experience appropriate for the teaching needs of this PSP.

Staff are annually assessed by students for every course they teach primarily through questionnaires provided by MODIP that students fill in at the end of the course. There is no formalized peer review of teaching mechanism.

## **II. Analysis**

The PSP benefits from a pool of highly trained and experienced teaching staff drawn mainly from the University of Thessaly with some contributing staff from another 4 Greek universities, the National Research Institute, and other external contributors. This is evident from an impressive number of publications and patents, rewarded with many references in the national and international scientific literature, and from a generally favourable assessment of teaching staff by the students past and present during our interviews.

With a total of 30 teaching staff, the PSP appears to have enough staff members to meet the needs of its student population. The selection process for teaching staff appears to be based on meritocratic and transparent criteria, emphasizing scientific excellence in their relevant subject areas, which is the primary criterion. This ensures that qualified and competent staff are recruited to teach in the PSP.

The PSP supports continuous personal training and development of staff mainly through the newly established Teaching and Learning Support Centre (KEDIMA). However, this is restricted to staff from the University of Thessaly and does not seem to cover external contributors. Furthermore, participation of staff in courses delivered by the KEDIMA appeared to be ad hoc rather than structured. Despite the considerable teaching experience of staff, it is important to ensure continuous personal development in the pursue of excellence through learning and applying modern effective tools, resources, and methods in teaching. This can be done through a structured annual program of staff personal development plan rather than relying on an ad hoc system without monitoring by management. Staff mobility schemes and educational staff leaves, albeit voluntary, should also be structured rather than ad hoc.

Teaching staff are assessed by students annually for every course they teach mainly through a questionnaire that students complete at the end of each course. There appears to be good questionnaire completion uptake by students and feedback is positive. Staff will benefit from a formal peer review of teaching scheme. This can be in the form of a “teaching buddy” pairing staff to observe one lecture from each other’s lectures and provide confidential feedback to each other through a face-to-face discussion. Teaching buddies may not be the same each year but should change for transparency and quality assurance. This will be particularly useful in the case of external teaching contributors from industry who may not have appropriate teaching qualifications and/or experience and are not able to benefit from personal development opportunities offered by the University of Thessaly. Disappointingly, the electronic course assessment by MODIP is unsuccessful as no students completed it.

## **III. Conclusions**

The PSP teaching staff demonstrate strengths in experience, expertise, and commitment to professional development, although there is room for improvement in formalizing/clarifying continuous staff development policies to further enhance quality assurance in the pursue of

continuous excellence. Developing structured personal plans for individual staff supported by feedback mechanisms can provide valuable insights to management for staff evaluation and improvement.

It is not clear how quality assurance of teaching is achieved in the case of external teaching contributions who might not have the appropriate teaching qualifications and/or experience.

The current student evaluation of teaching mechanisms through questionnaires for each course ensures consistent teaching quality and continuous improvement, but the MODIP teaching assessment of the PSP is disappointing and needs careful consideration.

Staff will benefit from a formal peer review of teaching scheme in the form of a “teaching buddy”.

The PSP seems to encourage scholarly activity, innovation in teaching methods, and the use of new tools, resources and technologies in teaching, but specific policies regarding this could be further elaborated for clarity. Clear guidelines on this issue can enhance teaching quality and in the pursue of continuous improvement and excellence.

#### **Panel Judgement**

<b>Principle 5: Teaching staff of postgraduate study programmes</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

#### **Panel Recommendations**

Introduce a formal annual personal development plan for each staff, offering a variety of structured opportunities for staff development, including participation in conferences, workshops, and training programs relevant to their areas of expertise.

Introduce a formal peer review of teaching scheme in the form of a “teaching buddy”.

Encourage and formally monitor scholarly activity and innovation in teaching methods to foster a culture of continuous learning and improvement.

Ensure that external teaching contributors have appropriate teaching qualifications and/or experience and provide relevant training if necessary.

Conduct regular reviews of staff development procedures to ensure alignment with evolving educational trends, institutional goals, and regulatory requirements.

## PRINICPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMME. 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, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

*Institutions and their academic units must have sufficient resources and means, on a planned and long-term basis, to support learning and academic activity in general, so as to offer PSP students the best possible level of studies. The above means include facilities such as the necessary general and more specialised libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, IT and communication services, support and 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 students, students with disabilities), in addition to 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 proves -on the one hand- the quantity and quality of the available facilities and services, and -on the other hand- that students are aware of all available services.*

*In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.*

### **Documentation**

- Detailed description of the infrastructure and services made available by the Institution to the academic unit for the PSP, to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding firm commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the PSP (job descriptions, qualifications and responsibilities)
- Informative / promotional material given to students with reference to the available services
- Tuition utilisation plan (if applicable)

## **Study Programme Compliance**

### **I. Findings**

The physical infrastructure on campus is modern and comprehensive providing students with classrooms, study rooms, libraries, well-equipped laboratories, conference rooms, a range of electronic resources, and several recreational and sport facilities. Student dormitories and a restaurant/cafeteria are also found on campus which is easily accessible by public transport from the city of Larissa.

Several services including personal counselling, welfare, career guidance, and academic advising cater to the needs of a diverse student body. Twenty-seven faculty are teaching in the PSP. There are ten administrative staff in the Department of Biochemistry and Biotechnology, one of who serves the PSP.

The forecasted revenue from tuition fees, as per the 2018 Senate decision regarding the re-establishment of the PSP, is 80.000 euros. According to the 2023 IQAS document on internal

evaluation, revenue from tuition is used to pay for laboratory and administrative expenses, and cover part of faculty travel expenses.

## **II. Analysis**

The PSP's approach to learning resources and student support is thorough. The availability of several student services helps create an environment where all students, regardless of individual circumstances, are offered equal opportunities to succeed.

## **III. Conclusions**

Modern and comprehensive physical infrastructure, several services for the benefit of students, qualified faculty and sufficient administrative support create a supportive academic environment for the PSP to be delivered. The EEAP has found the PSP to be fully compliant with principle six.

### **Panel Judgement**

<b>Principle 6: Learning resources and student support</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### **Panel Recommendations**

None

## **PRINCIPLE 7: INFORMATION MANAGEMENT**

**INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF POSTGRADUATE STUDY PROGRAMMES 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.*

*Reliable data is essential for accurate information and decision-making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on postgraduate study programmes and other activities feed data into the internal system of quality assurance.*

*The information collected 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 programmes*
- *availability of learning resources and student support*

*A number of methods may be used to collect information. It is important that students and staff are involved in providing and analysing information and planning follow-up activities.*

### **Documentation**

- *Report from the National Information System for Quality Assurance in Higher Education (NISQA) at the level of the Institution, the department, and the PSP*
- *Operation of an information management system for the collection of administrative data for the implementation of the PSP (Students' Record)*
- *Other tools and procedures designed to collect data on the academic and administrative functions of the academic unit and the PSP*

## **Study Programme Compliance**

### **I. Findings**

The PSP has developed a good information management system for current and past students. Suitable key performance indicators (KPIs) have been established and there is good application of learning resources and availability of student support, both formally and informally. Student progression, success, dropout rates and student satisfaction rates are monitored, and relevant detailed data were provided to the assessing panel.

The department maintains a centralized information system to manage the Quality Assurance process. Course evaluation surveys are conducted meticulously by MODIP and there is a process for analysing and acting upon the evaluation results. The evaluation of the courses is performed at the end of each semester for all courses and faculty.

The Internal Evaluation Unit (OMEA) is mainly responsible for the operation of the QA associated systems. Information and data on faculty performance analysis, administrative support, funding, etc. is also under regular monitoring.

## **II. Analysis**

Some suggestions/follow-ups from student surveys are taken by teaching staff to the PSP committee for approval. Once approved, they are then actioned for the following academic year, but it is not clear whether this is communicated clearly to the students. Student evaluations of courses take place in a clear way using questionnaires with well-formulated questions, but the percentage of students evaluating their courses is still relatively low (21.74%).

The professional career paths and development of the PSP graduates are being monitored systematically and in great detail. Data from past PSP graduates are gathered in relation to their professional aspirations, their current location (in Greece or abroad), whether they are in employment or not, what is the nature of their employment, does their employment relate in any way to knowledge/skills obtained by their PSP studies, how long was the intervening time period between graduating from the PSP and finding employment, are they satisfied with their earnings and many other factors. These questions aim to understand in depth the degree of the PSP contribution to the students' future career development so that the relevance and societal contributions of the PSP can be assessed. Analyses of various data were presented as pie-charts or bar-charts giving percentages of students.

## **III. Conclusions**

The PSP has an excellent Information Management System. The panel finds that, overall, the program fully complies with Principle 7. However, the PSP should pay more attention in collecting and analysing up-to-date data related to Quality Assurance.

## Panel Judgement

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

## Panel Recommendations

The PSP needs to enhance student participation in course evaluations by reminding students to submit questionnaires, highlighting positive changes resulting from the process and emphasizing the importance of the evaluation process to students. Greater attention is required for student evaluations of staff to increase awareness among students about the significance of the evaluation process in improving program quality and delivery.

A clear strategy related to the flow of information must be developed and implemented. It was unclear to the panel whether all the analyses were communicated or indeed utilized by all faculty to the benefit of the PSP.

A dedicated alumni portal could be developed to promote post-graduation interactions that can facilitate important networking activities among graduates and further collaborations within the department and the PSP. The establishment of an external advisory committee would help in this direction.



## **PRINCIPLE 8: PUBLIC INFORMATION CONCERNING THE POSTGRADUATE STUDY PROGRAMMES**

**INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES RELATED TO THE POSTGRADUATE STUDY PROGRAMMES IN A DIRECT AND READILY ACCESSIBLE WAY. THE RELEVANT INFORMATION SHOULD BE UP-TO-DATE, OBJECTIVE AND CLEAR.**

*Information on the Institutions' activities is useful for prospective and current students, graduates, other stakeholders, and the public.*

*Therefore, Institutions and their academic units must provide information about their activities, including the PSP they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures applied, the pass rates, and the learning opportunities available to their students. Information is also provided on the employment perspectives of PSP graduates.*

### **Documentation**

- *Dedicated segment on the website of the department for the promotion of the PSP*
- *Bilingual version of the PSP website with complete, clear and objective information*
- *Provision for website maintenance and updating*

## **Study Programme Compliance**

### **I. Findings**

The Greek language dedicated website of the PSP in Toxicology includes several webpages where details regarding the objectives and the structure of the program, admission criteria, application forms, cost of studies, opportunities for scholarships and other relevant information that a prospective or current student or another party may be interested in can be found. Further, documents including the study guide, course outlines, procedures for student complaints, code of ethics, internal rules and procedures, and the quality assurance policy of the Department are uploaded in the PSP's dedicated website. All the above information is clearly stated and current and available at: <http://pms-toxicology.bio.uth.gr/el/programme>.

The English language version of the PSP website is comparable in detail to that available in Greek.

A notable feature in the PSP's site is a webpage, both in Greek and in English, dedicated to student publications over the past several years.

### **II. Analysis**

Whether navigating the PSP's website in Greek or in English, the visitor can view detailed, current, and complete information regarding aspects of the program.

### **III. Conclusions**

The EEAP has found that the PSP's websites in Greek and in English are both well-designed providing up-to-dated information useful to students and members of the community. The PSP is fully compliant with principle 8.

### Panel Judgement

Principle 8: Public information concerning the postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

### Panel Recommendations

None

## **PRINCIPLE 9: ON-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES**

**INSTITUTIONS AND ACADEMIC UNITS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR POSTGRADUATE STUDY PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND POSSIBLE AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.**

*The regular monitoring, review, and revision of postgraduate study programmes aim at maintaining the level of educational provision and creating a supportive and effective learning environment for students.*

*The above comprise the evaluation of:*

- a) the content of the programme in the light of the latest research in the given discipline, thus ensuring that the PSP is up to date*
  - b) the changing needs of society*
  - c) the students' workload, progression and completion of the postgraduate studies*
  - d) the effectiveness of the procedures for the assessment of students*
  - e) the students' expectations, needs and satisfaction in relation to the programme*
  - f) the learning environment, support services, and their fitness for purpose for the PSP in question*
- Postgraduate study 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.*

### **Documentation**

- *Procedure for the re-evaluation, redefinition and updating of the PSP curriculum*
- *Procedure for mitigating weaknesses and upgrading the structure of the PSP and the learning process*
- *Feedback processes concerning the strategy and quality goal setting of the PSP and relevant decision-making processes (students, external stakeholders)*
- *Results of the annual internal evaluation of the PSP by the Quality Assurance Unit (QAU), and the relevant minutes*

## **Study Programme Compliance**

### **I. Findings**

The Toxicology PSP was founded in 2015 and re-founded in 2018. It is well organized and delivered by the University of Thessaly with the help of external contributions from other Greek institutions, the National Research Institute, and other organisations. It aims to provide specialist, quality education and training to scientists aspiring to follow a career in applied toxicology. It appears to be a leading PSP within Greece in the field of toxicology.

It attracts students from other Greek universities, a large number (49%) from the Aristotle University of Thessaloniki, and from the University of Thessaly itself (24%). The large majority of the PSP students are between 22-25 years old presumably joining the PSP immediately after completion of their first UG degree.

The PSP includes all procedures required by the institution for internal and external systematic evaluations and improvement of all educational and research work carried out within the PSP, as well as implementation of the required certification procedures.

Evaluations appear to be systematic and on an ongoing basis via specific MODIP questionnaires. The questionnaire completion rate was given as 21.74%. There appears to be ad hoc revisions of the content of the PSP curriculum and courses, and more systematic evaluation of the relative staff workloads and the degree of satisfaction of students. The PSP is committed to monitoring and adjusting the PSP content to reflect latest scientific progress and labour market needs mainly through ad hoc discussions and/or suggestions.

The internal evaluation process by MODIP aims to identify strong and weak elements of the PSP, establish new goals, and match them with the desired quality levels. The results of the last internal evaluation in 2023 were recorded in a special report drawn up by MODIP, which described in detail its findings. Its recommendations included increasing the extrovert nature of the PSP through linking better with society, increase the number of enrolling students, more collaborations with institutes nationally and internationally, more participations in research programmes, internalisation, invite specialist visitors with rich scientific record, improve teaching infrastructure and introduce diverse teaching methods.

There has not been an external evaluation of this PSP before, this is the first external evaluation being undertaken. There was an external departmental evaluation in 2022 and a document was provided to the panel appearing to imply that there was a PSP external evaluation then, but this misunderstanding was clarified and rectified during our meetings/discussions.

Feedback from students is mainly through formal questionnaires completed at the end of each course and informally through discussions with staff members. There appears to be good participation of students evident by the high percentage of students that complete the questionnaires.

Mentoring to each student is provided by dedicated personal tutors and by the diploma thesis supervisors. Students also have access to a range of supporting resources within the institute including a newly appointed institutional student advocate, if needed.

The panel noted that all students (current and past) and stakeholders were enthusiastic and supportive of this PSP.

## **II. Analysis**

PSP courses address current issues in the field of Toxicology, so that students obtain good knowledge and expert training to apply their toxicology skills in their future careers. PSP students are provided with a good level of knowledge and experience enabling them to become competent applied toxicologists with environmental awareness and emphasis on health and safety for workers and consumers alike.

There are appropriate evaluation processes that ensure substantial feedback to the organizing committee and the faculty involved. The organization of internal evaluation by the MODIP aims to ensure and improve quality. In particular, the monitoring of the structure and organization

of the curriculum, student satisfaction with the courses and their teachers, as well as the evaluation of the level of demand of graduates, the use of financial resources and the qualifications of teaching staff contributes to the continuous improvement of quality. The 2023 MODIP report provided a number of recommendations to the PSP which should be addressed in the near future.

From our discussions with current students, it was clear that they were satisfied with their engagements with academic tutors and felt that their feedback was considered.

Student workload, progression and completion are satisfactory with 40% of students completing their studies in time i.e. in 3 six-month terms, 25% in 4 six-month terms and 22% in 5 six-month terms. Only 13% of students needed more than 6 six-month terms to finish with their studies. Assessments are a combination of small written assignments combined with traditional exams and appear to be effective, evidenced by the overwhelming number (91%) of students achieving a final mark above 7.6/10.

The PSP will benefit by creating an external evaluating committee that reviews all aspects of the program in an unbiased way and offer potential improvements. Recent graduates and external to the PSP faculty could participate in this external advisory-evaluating committee. This evaluation could happen every two years and submitted independently for quality assurance purposes. However, it was reassuring to hear during our meetings that present stakeholders and participating business partners to this PSP have been asked via questionnaires to suggest potential inclusions and/or improvements for the teaching content of the PSP. This extroversion of the PSP is impressive and ensures continuous improvement in the pursue of excellence.

### **III. Conclusions**

The Toxicology PSP is very well managed, organized and run. The curriculum includes courses on current topics in the area of toxicology with emphasis on its applications, and final diploma practical training. The structure and organization of the internal evaluation is satisfactory and aims at a multi-faceted evaluation of the PSP contributing to its continuous update and relevance.

## Panel Judgement

Principle 9: On-going monitoring and periodic internal evaluation of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

## Panel Recommendations

Organise an external advisory committee in which stakeholders and past graduates can participate and offer potential improvements annually.

Close monitoring of actions based upon MODIP mediated internal assessment recommendations and student feedback should be implemented in a more structured manner communicating back to the students the implemented curriculum changes.

## **PRINCIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES**

**THE POSTGRADUATE STUDY PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY PANELS 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 PSP accreditation process which is realised as an external evaluation procedure, and implemented by panels of independent experts. HAHE grants accreditation of programmes, based on the Reports delivered by the panels of external experts, with a specific term of validity, following to which, revision is required. The quality accreditation of the PSP acts as a means for the determination of the degree of compliance of the programme to the Standards, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees. Both academic units and Institutions must consistently consider the conclusions and the recommendations submitted by the panels of experts for the continuous improvement of the programme.*

### **Documentation**

- *Progress report of the PSP in question, on the results from the utilisation of possible recommendations included in the External Evaluation Report of the Institution, and in the IQAS Accreditation Report, with relation to the postgraduate study programmes*

## **Study Programme Compliance**

### **I. Findings**

An undated document refers to the follow-up of the recommendations of the external evaluation of the University of Thessaly. The harmonization of the PSP in Toxicology with the direction and policies of the University is described briefly and in very general terms in the same document. The PSP has been evaluated internally by IQAS in 2023. The PSP has not been evaluated externally before.

### **II. Analysis**

This is the first time that an external evaluation of the PSP in Toxicology is taking place.

### **III. Conclusions**

The PSP is being externally evaluated by the EEAP.

## Panel Judgement

Principle 10: Regular external evaluation of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

## Panel Recommendations

None



## **PART C: CONCLUSIONS**

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

The PSP has a good track-record of success in enabling graduates to develop their future careers.

Well-designed PSP with clearly defined aims and objectives. It is structured clearly and developed over the years to accommodate modern topics in applied toxicology, linking teaching/research to actual societal needs.

There is clear evidence of continuous improvement of the PSP and a quality policy that supports the academic profile and orientation of the PSP, the students, and the participating teaching and administrative staff.

Current students, postgraduates, faculty, and stakeholders have positive experience with the PSP.

Learning resources and student support are successfully implemented in this PSP.

The department collects and analyses all data related to Quality Assurance and performs some analyses of the collected data.

70% of students make an experimental-based degree project, an excellent achievement, rare for Greece's conditions within the PSP level.

Webpage dedicated to student publications.

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

Staff development opportunities are not structured and monitored by management.

There is no peer-review of teaching.

No assurance that external teaching contributors have appropriate teaching qualifications and/or experience.

Bibliography is outdated in some courses, needs to be update.

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

More activities with the labour market.

Improvement of external extroversion.

The statement of quality policy of the PSP in Toxicology should be stated on the website as well.

Teaching staff and social partners should try to reduce the average duration of studies to 3 semesters.

Introduce a formal annual personal development plan for each staff, offering a variety of structured opportunities for staff development, including participation in conferences, workshops, and training programs relevant to their areas of expertise.

Introduce a formal peer review of teaching scheme in the form of a “teaching buddy”.

A dedicated alumni portal could be developed to promote post-graduation interactions that can facilitate important networking activities among graduates and further collaborations within the department and the PSP. The establishment of an external advisory committee would help in this direction.

A clear strategy related to the flow of information must be developed and implemented. It was unclear to the panel whether all the analyses were communicated or indeed utilized by all faculty to the benefit of the PSP.

Organise an external advisory committee in which stakeholders and past graduates can participate and offer potential improvements annually.

Up-to-date bibliography as appropriate.

#### IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.**

The Principles where substantial compliance has been achieved are: **None.**

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

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

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

## The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

1. **Prof. Nikolaos Venizelos, (Chair)**  
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