



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@ethaee.gr • www.ethaee.gr

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

Pharmaceutical Biotechnology

Department: Molecular Biology and Genetics

Institution: Democritus University of Thrace

Date: May 2025



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 New Postgraduate Study Programme of Pharmaceutical
Biotechnology of the Democritus University of Thrace 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 new postgraduate study programme of Pharmaceutical Biotechnology of the Democritus University of Thrace comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Soultanas Panagiotis (Chair)**
School of Chemistry, University of Nottingham
- 2. CHRISTOPHIDES GEORGE**
Imperial College London
- 3. FOTAKI NIKOLETTA**
University of Bath
- 4. Mystridis Georgios**
Aristotle University of Thessaloniki

II. Review Procedure and Documentation

The Hellenic Authority for Higher Education (HAHE) formed an external and independent panel of experts to assess the compliance of the new study postgraduate program of Pharmaceutical Biotechnology of the Democritus University of Thrace (DUTH), in accordance with the HAHE Quality Assurance requirements (laws 4009/2011 & 4653/2020). The assessment was conducted through document reviews and online interviews. The method used was an evidence-based process centered on a sampling of the Departments' activities and it was aimed at evaluating the fulfilment of the HAHE requirements of the relevant Quality Standard of the Postgraduate Study Program and commenting on its compliance, effectiveness, and applicability for the scope of the requirements. The information provided by the Department was assumed to be factually correct. The entire evaluation and accreditation exercise was carried out remotely using the Zoom platform.

An introductory meeting took place on the 31/03/2025 between the members of the HAHE panel to discuss the material provided by DUTH and the Program Committee. The HAHE also requested the ppt presentations that were shown on the 01/03/2025 which were provided promptly in Dropbox for downloading from members of the HAE panel.

The Panel reviewed the submitted documentation (A.0 to A.19), which is listed below:

- A.0 – [new] Table of contents
- A.1 – [new] Proposal of academic accreditation
- A.2 – Decision of the Senate for the establishment of the Program
- A.3 – MODIP Internal Evaluation
- A.4 – University's Policy Goal Setting
- A.5 – Feasibility Report
- A.6 – [new] Quality Assurance Policy
- A.7 – [new] Policy Goal Setting
- A.8 – [new] Study Guide
- A.9 – Courses Outline
- A.10 – Teaching Staff list
- A.11 – Rules for internal operations
- A.12 – [new] Regulations for Studies - Mobility - Thesis Preparation
- A.13 – Dealing with complaints Guide
- A.14 – Academic Counsellor rules
- A.15 – Deontological ethics code
- A.16 – Research staff - Performance Report
- A.18 – Regulations for Educational Process with Distance Learning Methods
- A.19 – Tuition Fees Utilization Plan

On the 01/04/2025, meetings with the Vice-Rector and course director Prof. Marirena Grigoriou, the Head of the Department Associate Professor Nicholas Glykos, teaching staff members of this PSP (external and internal), administrative staff, employers and external social partners took place via Zoom. The schedule was followed in order. Prospective students and alumni were not present on the agenda, as this is a new postgraduate program.

The course director and the teaching staff were all present, according to the approved timetable. In addition, the panel met with employers and social partners from the following organizations (in no particular order): Dr. Evangelos Karavas, The Chief Scientific Officer and President of the Board of Directors of Pharmathen SA which is a major partner in this PSP, Prof. Katerina Chatzaki, the Chief Executive Officer and Co-Founder of ABCCureD, Prof. Athanassios Papadopoulos, the President of the Association of Greek Chemists from Aristotle University and Dr. Eleni Rizou from the Panhellenic Union of Bioscientists at Saint Savas Cancer Hospital.

Overall, the review process (including preparation, meetings, and report writing) was completed smoothly without any significant issues or concerns. The HAHE panel expresses its gratitude to HAHE for effectively supporting the review of this new PSP. The extra material (ppt presentations) requested was immediately provided and all PSP participant and DUTH showed great enthusiasm and dedication to successfully accomplishing the accreditation procedure. The preparation of this evaluation was excellent.

III. Postgraduate Study Programme Profile

The DUTH was established in 1973 with a legislative decree no. 87 of July 27, 1973, as an Independent Higher Education Institution with University status. It began its operation in the academic year 1974-75 with the inaugural admission of students to the Departments of Civil Engineering in Xanthi and Law in Komotini. DUTH provides education at both undergraduate and postgraduate levels with 10 Schools, 28 Departments and approximately 42,000 undergraduate and post graduate students as a multisite Institution in 9 different cities. The Department of Molecular Biology & Genetics was established in 2000 in Alexandroupoli and is part of the School of Health Sciences. The Department runs its main Molecular Biology & Genetics undergraduate degree programme, which is unique in Greece and four postgraduate study programmes comprising Translational Research in Biomedicine, MSc in Molecular Biology by Research, Didactics of Biosciences, From Genome to Phenotype: experimental Genetic Approaches and an interdepartmental programme on Infectious Diseases and International Medicine: From Bench to Bedside. Since 2007, the Department participates in student exchange programmes having come to agreements with several European Universities and recently through the inclusion of DUTH in the European University Consortium EMERGE which involves 9 European Institutions.

The DUTH Senate with its 13/115/27-6-204 decision approved the establishment of this PSP as a Professional Diploma with the title Master of Science in Pharmaceutical Biotechnology and agreed its inaugural operation in the academic year 2025-26. For the award of this PSP, it is necessary the successful completion of four core subjects, the attendance at lectures and the preparation of a postgraduate Thesis. The orientation of this PSP is to provide postgraduate training in Pharmaceutical Biotechnology and to provide specialisation in this field through provision of specialist knowledge, experimental abilities and skills, so that graduates can contribute towards the discovery and development of innovative biopharmaceutical products. To deliver this PSP, the Department has signed a Memorandum of Cooperation with the pharmaceutical company Pharmathen SA, undertaking the obligation to train staff from this company in this PSP. In return, the company provides financial contribution and delivers an “Entrepreneurship and Innovation Workshop” to introduce students of this PSP to fundamental concepts of innovation in Pharmaceutical Biotechnology. Students learn about intellectual property rights, innovation and the challenges faced in developing and implementing innovative ideas in the pharmaceutical industry.

The PSP study programme comprises three 6-month semesters, the first two include core/compulsory lecture subjects and the last is dedicated to the completion of a Diploma Thesis. The entire PSP will be delivered in Greek or English in a blended format with 50% in-person learning and 50% distance learning, the latter being 35% synchronous and 15% asynchronous. To earn this Master of Science Degree, students must complete 90 ECTS credits over the three 6-month semesters. The ECTS credits are distributed through coursework across the first two semesters worth 60 ECTS credits and a final Diploma Master’s Thesis worth 30 ECTS credits prepared, presented and evaluated during the third semester. A provision is made for students of diverse scientific backgrounds to prepare themselves for this PSP through a “Preparation Cycle” before the programme begins. This

ensures that all participants acquire the necessary basic knowledge to follow the course.

The funding for this PSP is secured through funds provided by Pharmathen SA, the special account for research funds (EΛKE) and DUTH itself. No tuition fees are imposed to participating students. Participation in this PSP is full-time but part-time participation is allowed, assuming working students are occupied more than 20 hours per week in their jobs and the duration of their participation in this PSP does not exceed double the time of full-time participation.

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Strategy, Quality Assurance Policy and Quality Goal Setting for the New Postgraduate Study Programmes

INSTITUTIONS SHOULD INCLUDE IN THEIR STRATEGIC MANAGEMENT THE DEVELOPMENT, ORGANISATION, AND IMPLEMENTATION OF NEW POSTGRADUATE STUDY PROGRAMMES (PSP) IN SPECIFIC SCIENTIFIC FIELDS AFTER INVESTIGATING THEIR FEASIBILITY AND SUSTAINABILITY. INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY FOR THE NEW POSTGRADUATE STUDY PROGRAMMES AS PART OF THEIR STRATEGIC MANAGEMENT.

THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT THE PSP OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL INTERESTED PARTIES.

By decision/s of the Institutional Senate, the Institutions should adapt their strategy to allow for the provision of postgraduate study programmes, in addition to attending to the profile, vision, mission and strategic objectives of the Institution. In this strategy, the Institutions should anticipate the potential benefits, difficulties or risks from the implementation of new postgraduate study programmes and plan all the necessary actions to achieve their goals. The Institution's strategic choices should be documented through specific feasibility and sustainability studies, especially for new postgraduate study programmes.

In the case of PSP delivered by distance methods, the Institution prepares and applies an e-learning strategy. The Institution's e-learning strategy is integrated into its overall strategy and identifies educational goals while keeping up to the rapid technological changes and to the developments in pedagogical models. The Institution should include in its strategy the justification and feasibility as to why e-learning has been selected as the appropriate learning strategy for the particular programmes of study where it is applied.

In the context of e-learning, innovation strategies, the possibility of programme revision, the linking between learning and research (requiring knowledge of the latest innovations in order to select the most appropriate means to achieve the learning outcomes) should be taken into account.

The quality assurance policy of the academic unit for postgraduate study programmes should be in line with the Institution's strategy 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 postgraduate 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 continuous 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 and the availability 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 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 internal review and audit of the quality assurance system for the PSP through the cooperation of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU)*

Documentation

- *The Institutional strategy for postgraduate studies, which includes a special strategy for e-learning, as long as it is applied to the Institution's PSP*
- *Feasibility and sustainability studies for the new PSP*
- *Quality Policy of the academic unit for the development and improvement of PSP*
- *Quality Targeting of the academic unit for the PSP*

Study Programme Compliance

I. Findings

The Democritus University of Thrace (DUTH) has formally embedded the PSP "Pharmaceutical Biotechnology" into its strategic academic planning. This is evidenced by Senate Decision 25/97/16-11-2023 and further detailed in the documents submitted to the HAHE. The institutional strategy, as described in the Study Guide, underscores a commitment to postgraduate excellence, interdisciplinary collaboration, and strong engagement with the labour market.

A comprehensive feasibility and sustainability study is included on the HAHE submission. It addresses academic relevance, labour market demand, infrastructure, and financial sustainability. The strategic partnership with Pharmathen SA contributes industry expertise and infrastructure support, particularly for employee-students, and thus reinforces the programme's viability and professional orientation.

The institutional quality assurance (QA) policy is clearly defined in the founding decision document and aligned with the academic unit's specific quality strategy through documents such as the Quality Policy and Quality Targeting. The MODIP report confirms structured goal setting, implementation procedures, and involvement of stakeholders. However, the programme does not currently implement peer review of teaching, which was suggested during the interview as a means to enhance pedagogical quality and feedback processes beyond student evaluations.

A clearly articulated strategy for e-learning is found in the e-learning regulations document, which aligns with the overall programme structure and incorporates flexibility, asynchronous platforms, and adaptability to evolving pedagogical technologies. This integration reflects an institutional commitment to digital innovation in teaching delivery.

The governance model includes a Coordinating Committee composed of academic staff and a separate Joint Scientific Committee that includes industry representatives from Pharmathen SA. The Coordinating Committee, which holds primary decision-making authority, currently excludes external stakeholders and student representatives. During the interview, the panel strongly encouraged revising this structure to enable broader participation in strategic oversight, such as through combining the two committees or expanding membership of the Coordinating Committee.

The official documentation, including the Study Guide, Programme Regulations, and Course Syllabi, states that the MSc thesis may be either: a) an original experimental or laboratory-based research project (πειραματική διπλωματική εργασία), or b) a structured literature review (διπλωματική εργασία ανασκόπησης). During the interview, the panel strongly recommended that MSc theses shall be solely based on original research, with clear expectations for experimental or applied investigation, regardless of student background or employer arrangements. While a literature review is valid in its own right, this format lacks the empirical dimension that underpins postgraduate-level scientific training.

The programme's website is under development. Although the visual layout appears promising, the panel noted areas requiring improvement: uniform formatting of academic staff CVs, removal of multi-layered external links, and the inclusion of explanatory video content narrating available infrastructure. These changes are necessary to enhance student accessibility and stakeholder engagement.

Although the ECTS structure is clearly described, there is insufficient detail regarding the breakdown of student workload into contact hours, self-study, assignments, and group work. During the interview, it was noted that such clarity is essential to ensure full compliance with EQF Level 7 descriptors and to provide transparency for prospective students and external evaluators.

II. Analysis

The programme demonstrates substantial alignment with the core requirements of Principle 1. Its strategic foundation is well-documented and institutionally endorsed. The partnership with Pharmathen SA adds notable value in terms of relevance, resources, and long-term sustainability. The quality assurance policy is thorough and operationally supported by the academic unit's internal procedures. Nonetheless, some areas warrant improvement to fully align with best practice.

The absence of peer review for teaching, the underdeveloped definition of student workload in each PSP module, and the limited stakeholder involvement in programme governance reflect missed opportunities to strengthen transparency, feedback, and quality oversight.

The thesis policy presents a concerning issue. Permitting literature reviews in place of original research undermines the academic integrity and scientific rigor expected at the Master's level. Literature reviews, while valuable for theoretical orientation, do not typically involve formulating hypotheses, generating and analysing data, or applying research methodologies, which are essential for postgraduate scientific training. This policy is inconsistent with the institution's otherwise strong emphasis on research excellence and contradicts the expectations articulated during the panel interview. The availability of industrial laboratories and supervisory support further diminishes the rationale for offering non-research theses.

The e-learning component is appropriately structured and reflects pedagogical innovation. However, governance arrangements should be revised to include external advisors and student representatives within the core decision-making body. This would ensure inclusivity and responsiveness to both academic and professional developments.

III. Conclusions

The Professional Postgraduate Study Programme (PSP) Pharmaceutical Biotechnology is substantially compliant with Principle 1. It is firmly embedded within the strategic priorities of the Democritus University of Thrace, supported by a formal Senate decision, and underpinned by a coherent institutional mission that values quality, innovation, and alignment with labour market needs. The partnership with industry and the integration of modern e-learning strategies position the programme well within the landscape of contemporary postgraduate education.

A structured and well-documented quality assurance framework is in place, aligned with institutional policies and supported by mechanisms for goal setting and ongoing evaluation. The feasibility and sustainability studies are comprehensive, and the industrial collaboration provides tangible support for the programme's long-term viability.

However, a number of areas require further attention in order to fully align with best practice and the expectations of excellence. Most notably, the current policy permitting literature reviews in lieu of original research for the MSc thesis undermines the academic rigor and level of research training expected at EQF Level 7. Furthermore, the definition of student workload and its alignment with ECTS credits lacks sufficient granularity and transparency. These issues, together with opportunities to strengthen governance, teaching evaluation, and communication strategies, present a clear pathway for the programme to enhance its quality assurance and strategic implementation.

Panel Judgement

Principle 1: Strategy, Quality Assurance Policy and Quality Goal Setting for the New Postgraduate Study Programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

To ensure full alignment with the requirements of Principle 1 and to advance the programme towards best practice and excellence, the panel recommends the following:

1. **Revise the thesis policy:** Amend the current policy to require that all MSc theses are based on original research, involving experimental or applied investigation. Literature reviews should not be accepted as standalone thesis submissions. This revision will ensure compliance with EQF Level 7 standards, enhance the academic standing of the programme, and promote the acquisition of essential scientific skills.
2. **Strengthen programme governance:** Expand the membership of the Coordinating Committee to include external stakeholders, particularly from the pharmaceutical industry, as well as student representatives. This adjustment will improve transparency, accountability, and relevance in decision-making processes.
3. **Enhance communication and accessibility:** Finalise and standardise the programme website to ensure consistent formatting of staff CVs, remove redundant hyperlink structures, and incorporate explanatory video content for the infrastructure. These improvements will facilitate clearer communication with prospective students and external stakeholders.
4. **Improve quality assurance of teaching:** Introduce peer review mechanisms for teaching, in addition to student evaluations, to foster continuous improvement and constructive feedback within the academic staff.
5. **Clarify student workload and ECTS allocation:** Provide a more detailed and transparent breakdown of the student workload, detailing contact hours, self-directed learning, assignments, and group work. This should be explicitly linked to the ECTS credit allocation in accordance with EQF Level 7 descriptors, thereby supporting both quality assurance and student clarity.

Principle 2: Design and Approval of New 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 NEW POSTGRADUATE STUDY PROGRAMMES. THE OBJECTIVES, THE SPECIFIC SCIENTIFIC SUBJECT AND THE STREAMS OR SPECIALISATIONS, THE EXPECTED LEARNING OUTCOMES AND THE EMPLOYMENT PROSPECTS ARE SET OUT IN THE PROGRAMME DESIGN. DURING THE IMPLEMENTATION OF THE NEW 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, the specialisations, the expected learning outcomes, the structure, the courses, the teaching and assessment modes, the teaching staff and the necessary resources 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. In particular, for each expected 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 for the 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 NQF, 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: teaching assignments per subject area and per course*

Study Programme Compliance

I. Findings

The DUTH offers a Master's degree comprising 90 European Credit Transfer and Accumulation System (ECTS) credits, awarded upon the successful completion of four modules and a Master's Thesis. The program is designed to be completed in three semesters (1.5 years) and adheres to both Greek and EU standards.

The design and development of this PSP in Pharmaceutical Biotechnology follow a clearly documented and structured process guided by the institutional strategy, with input from external stakeholders, including the pharmaceutical company Pharmathen SA. The Student Guide outlines the main elements of the PSP, such as learning outcomes, curriculum, structure, staff, and resources.

Evaluation methods for assessing learning outcomes are not yet in place, as the PSP has not started, but have been designed and are ready to be implemented as soon as the PSP starts its operations. Work-based learning will likely apply to candidates who are Pharmathen SA employees. The integration of teaching and research will be primarily achieved through the Master's Thesis component and attendance at seminars. Student support will be provided through academic advisors. Additionally, Erasmus programs are available, offering students the opportunity to visit higher education institutions within the EU.

II. Analysis

The PSP at DUTH is a well-structured and methodically developed program. Its development process incorporates academic, institutional, and market-driven criteria. The four modules are mapped to specific learning outcomes, focusing on advanced knowledge and critical thinking in pharmaceutical biotechnology. A research thesis project is essential for a Master's degree; a review article would not meet the requirements for a Master's thesis. A non-research-based thesis may have consequences for graduates, as it may not provide the tools necessary for progressing with research nationally and internationally.

At this stage, periodic revisions of the program curriculum are not in place, as the program has not started yet. However, it would be beneficial to define the frequency of curriculum revisions. Written student evaluations will be used to monitor and improve courses.

As the program has the potential to be delivered in English, the Student Guide could also be available in English. The Student Guide, could also be available in English to all students and should be uploaded both in the Greek and English PSP

websites. Traditional teaching methods are used, and a general description of the assessment processes is included in the module descriptions, though details of the exam format are not provided.

External stakeholders, such as Pharmathen SA, are involved in several aspects of the PSP, ranging from sponsorship and delivery of lectures to participation in committees. Eight out of the sixteen students will be Pharmathen SA employees.

Teaching and research will be linked primarily through the thesis, as well as through seminars and workshops, underscoring the need for a research-based thesis. While work experience is not included in the program, it should be noted that half of the cohort will be Pharmathen SA employees.

III. Conclusions

The PSP at DUTH meets the standards regarding the design and approval of new postgraduate programmes. The PSP has been developed through a rigorous process, ensuring its academic integrity and relevance to industry needs.

Panel Judgement

Principle 2: Design and Approval of New Postgraduate Study Programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

Future enhancement could focus on the inclusion of formalised work-based learning opportunities (for the part of the cohort who are not employees of the pharmaceutical industry sponsoring the PSP).

1. Future enhancement could focus on the inclusion of formalised work-based learning opportunities (for the part of the cohort who are not employees of the pharmaceutical industry sponsoring the PSP).
2. The publicly available information of the PSP, its structure and courses should be updated as soon as the PSP has been assessed and accredited.
3. Include clear description of the assessment processes and exam format in the Student Guide and all relevant resources (i.e. the e-platform).

Principle 3: Regulations for 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).

The Institution should develop and publish the internal regulations prescribed by law which, among other things, should regulate all issues of postgraduate studies from the beginning to the end of the studies.

Indicatively:

- *The students' 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*

In case that the PSP is offered through distance learning methods, the Institution should have in place a regulation for e-learning, including in particular the following issues:

- *Services of the Institution to support e-learning*
- *Methodology for the development and implementation of courses*
- *Ways of providing teaching and variety of teaching and assessment modes*
- *General standard of course structure*
- *Student support system*
- *Support of faculty/teachers with mandatory e-learning training for new staff members*
- *Technological infrastructures made available by the Institution*
- *Student identity confirmation system (student identity check, assignment and exam writing process, security and certification issues).*
- *The Institution should establish rules for the provision of appropriate access and for the assurance of the participation of students affected by disability, illness, and other special circumstances.*
- *Ethical issues, such as those concerning data protection, intellectual property rights and rules for protection against fraud are governed by the e-learning regulation.*

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

Documentation

- *Internal regulation for the operation of the postgraduate study programme*
- *Special regulation for the implementation of e-learning if the PSP is delivered through distance methods*
- *Research Ethics Regulation*
- *Regulation of studies, internship, mobility, and student assignments*
- *Degree certificate template and Diploma Supplement template*

Study Programme Compliance

I. Findings

The PSP will admit up to sixteen (16) students per year in two categories. Of those, up to eight (8) will be proposed by the academic partner Pharmathen SA (Category A) and up to eight (8) will be recruited by a public call (Category B).

Admission criteria are transparent and publicly available in the Student Guide and the PSPs website. The Student Guide is concise and publicly available on the PSP website both in English and Greek. Accepted to the programme will be Chemists, Pharmacists, Biologists and relevant backgrounds. Tuition for all students set at €5.000 will be covered by Pharmathen SA, thus the program offers no Scholarships.

The PSP utilizes the ECTS system across the curriculum and the function of the Academic Advisor for the monitoring of the student progression.

A Thesis Handbook is available both in English and Greek. A written Code of Research Ethics is in Place for the Institution (DUTH) applying also to the PSP. There is a detailed description of the grading system for course essays.

The PSP will give two Excellence Awards per academic year, without a financial component.

No terms and conditions to enhance student mobility were available.

Several workshops and seminars are to be provided in the duration of the PSP. The academic partner is committed to support its employees to attend the program with all available means.

II. Analysis

All regulations and procedures, as well as the structure of the PSP are described in the Study Guide. Student progression is monitored by the institution of the academic advisor. The PSP applies the ECTS system to its curriculum. While student mobility is available through Erasmus, it is not mentioned on the website.

There are two sets of minimum admission criteria for the students depending on whether they are Pharmathen SA employees or not. The final selection of candidates from Category A is made by the proposing partner Pharmathen SA and Category B by the PSP.

The PSPs length is three Semesters. In each of the first two semesters there are two courses, one of theoretical and one of practical background, each having 15 ECTS credits. The taught component of each course is 39 hours in 13 weeks (3 hours/week). For the most part the courses are delivered via distance learning methodologies, either synchronous or asynchronous.

In the third semester there is the implementation of a Master's Thesis that accounts for 30 ECTS credits. For the implementation of the master thesis a set of

guidelines is available in the Thesis Handbook.

There is no option for practical training in place despite the collaboration with Pharmathen SA.

The Diploma Supplement is issued without request both in Greek and English.

III. Conclusions

The PSP is well designed, however there are a few issues that require attention as outlined below in the Panel Recommendations.

Panel Judgement

Principle 3: Regulations for Student Admission, Progression, Recognition of Postgraduate Studies, and certification	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

1. The application of two sets of minimum admission criteria could lead to heterogeneity in the student capabilities.
2. Given the professional nature, the curriculum of this PSP and the commitment of Pharmathen SA to facilitate the attendance by its employees, the Master's Thesis must be limited to original research only.
3. Given the way the ECTS credits were calculated and allocated in each of the four courses it is heavily implied that there are a lot of self-learning hours. The specific number and extent of out-of-class requirements (e.g. essays) for each course must be accurately described in the study guide. This is necessary both to inform the prospective students of the prospective heavy workload and to fully justify the 15 ECTS credits allocated to each course. The latter is necessary since for each course there is only a 39-hour tough component the majority of which is through distance learning. The allocation of further points away from the final written exam for each course could be considered for a more student-centered approach.
4. An optional practical training course for students not employed by Pharmathen SA could be considered since this is a Professional Master's Degree.

Principle 4: Teaching Staff of New 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 and scientific competence of the teaching staff at the PSP, the appropriate staff-student ratio, the proper staff categories, the appropriate subject areas, the fair and objective recruitment process, the high research performance, the training, 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, policy for attracting highly qualified staff, and PSP Obligation Regulation*
- *List of the intended for recruitment teaching staff including subject areas, employment relationship, Institution of origin, Department of origin and relevant individual achievements*

Study Programme Compliance

I. Findings

The adequacy and scientific competence of the teaching staff are assessed based on their scientific research and teaching work, as well as their professional background, where appropriate. The teaching ability of newly recruited staff is assessed through trial lectures, organized during the recruitment process, that are attended by current members of staff and students organized during the recruitment process. All the recruitment processes are carried out through the electronic APELLA system to ensure complete transparency.

Staff participating in this PSP have appropriate expertise in the field of Biopharmaceuticals and Biotechnology evidenced by published research in reputable scientific journals. External lecturers (not staff of DUTH) are also used where appropriate with their relevant expertise on specific PSP courses. 21 teaching staff participate in this PSP, 5 of whom are external participants. All teaching staff are paid exclusively from the resources of this PSP.

Teaching evaluation appears to be exclusively through student questionnaires towards the end of each 6-month semester. There is a Teaching & Learning Support

Center within DUTH that supports the process of improving teaching through relevant seminars and interactive workshops on university pedagogy. More specifically, the Teaching & Learning Support Center will offer one teaching seminar at the start of each academic year to the teaching staff of this PSP to be trained on issues of adult teaching, as a significant part of this PSP's students are likely to be older, in issues relating to distance education and the use of appropriate e-learning platforms. At this seminar, there will also be a presentation on the available supporting materials for teachers at DUTH.

DUTH awards annually an award for teaching excellence to active lecturers. The aim of this award is to recognize and promote teaching excellence. Personal development in teaching may be supported by the Teaching & Learning Support Center whereas in further development in scientific research is offered through encouraging participation in ERASMUS+ mobility programs and national and international scientific conferences.

II. Analysis

The staff recruitment process for this PSP appears to be fair, objective and transparent putting emphasis on how their expertise directly relates to the subject matter of this PSP (Pharmaceutical Biotechnology). Teaching evaluation appears to be exclusively by students through a questionnaire provided at the end of each semester for every subject. No sample of this questionnaire was provided with the PSP documentation submitted to HAHE but a sample was provided promptly to the HAHE panel after requesting it. Teaching evaluation exclusively through student questionnaires may be somewhat imbalanced in certain cases. Perhaps a peer review of teaching system (e.g. teaching body allocations) should also be implemented to address this imbalance. Experienced teaching colleagues can be assigned as "teaching bodies" and could observe 1-2 lectures to convey constructive feedback to teaching staff. This will be particularly useful for newly recruited teaching staff and/or external teaching staff who may not be entirely familiar with the DUTH teaching standards. Less experienced staff can also take advantage of the Teaching & Learning Support Center to further their career development. The annual teaching excellence award is a recognition for staff and may aid in their personal development. However, the PSP and DUTH more widely do not offer specific personal development plans for staff to closely track, encourage and facilitate staff development. This is left to the ad hoc intentions and plans of individual staff.

Teaching loads of participating staff appear to be well distributed among staff with average teaching hours of 6,9 per staff (maximum 11,7 hours/staff and minimum of 1,7 hours/staff). The teaching seminar at the start of each academic year offered by the Teaching & Learning Support Center to all staff is excellent practice and the PSP should be commended on this.

Some general information on the research outputs of teaching staff appears to be available on the PSP website, based mainly on collective data from Scopus, but

specific biographical and scientific information on individual PSP lecturers does not appear to be available on the PSP website.

III. Conclusions

This PSP is compliant with most issues relevant to Principle 4. The PSP does ensure that the knowledge and skills of the teaching staff are appropriate for the subject matter, it has in place a fair, effective and transparent staff recruitment process, it offers some opportunities for staff training and development but it does not have in place personalized staff development plans.

Panel Judgement

Principle 4: Teaching Staff of New Postgraduate Study Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. Consider implementing a peer review of teaching system, allocating experienced teaching bodies to observe individual lecturers and offer one-to-one constructive feedback.
2. Include biographical information, publications and research grant awards for individual staff on the PSP website in a uniform format.
3. Consider the implementation of personal development plans for individual staff either at the PSP level or the institutional level, as appropriate.

Principle 5: Learning Resources and Student Support

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMMES. 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, 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 and foreign students, students with disabilities), in addition to the shift towards student-centered 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 e-Class software effectively supports the teaching activities of the PSP. After admission, all students are promptly provided with the necessary tools (e.g., Office Suite, Academic Email, Access to online libraries). Class and lab material (notes, reports, exercises, PowerPoint presentations) will be uploaded onto the web and be readily available to all enrolled students.

There are five (5) classrooms available for the program, one (1) with 120 people capacity, two (2) with 100 people capacity, one (1) with 80 people capacity and one (1) with thirty (30) people capacity. Furthermore, there are two (2) labs available (40 and 30 people capacity), one computer room (35 people capacity) and one VR computer room (30 people capacity). All are in the Department of Molecular

Biology & Genetics (DMBG) of DUTH and are well equipped (internet access, projectors etc.) to support both traditional and remote learning. Students of the PSP have access to the Institution Library which is in proximity.

The PSP has enacted the Academic Advisor function. Further support is provided by the DUTH for vulnerable social groups, counselling and psychological support, students with special needs and accessibility issues. Students of the PSP will also benefit from the DUTH study and career liaison office, a student advocate, a public and international relations office and many other DUTH structures and services that are available to all students, including the PSP students. The PSP is supported by the Secretary of the Department, (one head and two clerks).

A tuition utilization plan is in effect.

II. Analysis

Beyond the considerable array of support and services offered by the DUTH, the DMBG has a dedicated infrastructure for the education/training of the proposed 16 postgraduate students per year. That includes state-of-the-art classrooms and lab rooms, computer rooms and a VR room.

The support services available will be made known to the students at an orientation session at the beginning of the PSP.

The administrative staff, which is shared between this PSP and other functions, was confident that the bureaucratic burden of this new PSP could be handled appropriately. There is no dedicated staff for the PSP.

The tuition utilization plan is well balanced.

III. Conclusions

Overall, the panel finds that there are sufficient learning resources and student support available to the PSP. The administrative staff is capable of supporting the PSP. The collaboration with Pharmathen SA also ensures those findings.

Panel Judgement

Principle 5: Learning Resources and Student Support	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. At the next external evaluation students' awareness and satisfaction of the wide spectrum of available services should be examined.
2. At the next external evaluation the sufficiency of the administrative staff should be examined again.

Principle 6: Initial Internal and External Evaluation and Monitoring of New Postgraduate Study Programmes

INSTITUTIONS AND ACADEMIC UNITS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM, FOR THE AUDIT, INTERNAL AND EXTERNAL EVALUATION OF THE NEW POSTGRADUATE PROGRAMMES, THUS ENSURING COMPLIANCE WITH THE PRINCIPLES OF THE PRESENT STANDARDS. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

The internal evaluation of the new PSP includes the assessment of the accreditation proposal, as well as the documentation in accordance with the Principles of the present Standards and the quality procedures of the Institution's Internal Quality Assurance System (IQAS). The internal evaluation of new postgraduate study programmes also aims at maintaining the level of educational provision and creating a supportive and effective learning environment for students. The Institution, through its Quality Assurance Unit (QAU) and the corresponding academic units, organise and support the external evaluation procedures of the new PSP, according to the specific guidelines and directions provided by HAHE.

The above comprise the assessment of:

- the objectives, content, and structure of the curriculum, the knowledge offered and the level of science and technology in the given discipline, thus ensuring that the PSP is up to date, according to the relevant documentation listed in the decisions of the pertinent bodies*
- the entailed students' workload for the progression and completion of postgraduate studies*
- the satisfaction of the students' expectations and needs in relation to the programme*
- the learning environment, support services, and their fitness for purpose for the PSP in question*

Postgraduate study programmes are designed and established in accordance with the provisions of the Institution's internal regulations, involving students and other stakeholders.

Documentation

- *The Quality Assurance Unit (QAU) procedure for verifying whether the requirements of the Standards for Quality Accreditation of New PSP are met, as well as the procedure for organising and supporting their external evaluation procedures*
- *Assessment and feedback mechanisms of the PSP strategy and quality targeting, and relevant decision-making processes (students, external stakeholders)*

Study Programme Compliance

I. Findings

The MODIP of DUTH is responsible for the internal quality assurance system in close cooperation with participating academic units/departments. As this is a new PSP to start in the 2025-2026 academic year, MODIP assessed and evaluated the accreditation proposal, as defined by the legislative regulations of law 4957/2022 and the evaluation invitation of HAHE (32651/06-02-2023), based upon three major themes: the strategy of DUTH for the development of PSPs, the strategy of DUTH for e-learning and the quality assurance policy of the academic unit for this PSP. This initial assessment is essential for a new PSP to begin its operation. A report was written by MODIP concluding that this PSP has appropriate strategy in place for its

operation in accordance with the wider strategy objectives of DUTH. More specifically, MODIP assessed the distance e- learning delivery and teaching methods of this PSP and concluded they are appropriate and in line with those recommended and adopted by DUTH, limiting e-learning to 50% of the overall teaching activities. The strategy of the PSP was found to be fully committed to adapting to modern scientific requirements and challenges, to achieving teaching milestones and outcomes set, to promote scientific knowledge and research and to fully support its students for an effective and enjoyable learning experience.

Going forward, future annual internal evaluations of this PSP will be conducted by MODIP which will appoint independent internal evaluators to examine student assessment data that are collected for every module on a 6-month basis through appropriate e-questionnaires. The findings of these annual evaluations will be considered by the PSP coordinating committee and action plans will be drawn to remedy shortcomings where appropriate. Major changes/modifications to the PSP study programme will need to be approved by the DUTH senate. The PSP coordinating committee comprises of the PSP Director and four staff from the department of Molecular Biology & Genetics of DUTH. Another joined coordinating committee comprises the PSP Director, 2 members of the PSP coordinating committee and 2 staff from PharmathenSA.

External evaluations of this PSP will be conducted by HAHE on a 5-year basis.

II. Analysis

The accreditation proposal is in accordance with the principles of the present standards and quality procedures of the DUTH's internal quality assurance system. The PSP aims to maintain a high level of educational provision and to create a supportive, effective and enjoyable learning environment for its students.

The process of annual internal evaluations is clearly set out and external evaluations will be conducted solely by the HAHE on a 5-year basis. No external evaluators and/or student members are specified on the PSP board to be able to offer independent external advice on an annual basis. The HAHE panel understands that this is not a legal requirement, however it is best practice in the continuous pursue of excellence and is not prohibited by law.

The HAHE panel is not entirely convinced for the need of two coordinating committees and does not understand why there should be two separate but somewhat overlapping PSP coordinating committees. A justification was provided based upon the legal requirements for a 5-member PSP board comprising exclusively of staff but the legal requirements do not prohibit Pharmathen SA having observers on the PSP board.

III. Conclusions

This PSP is compliant with most issues relevant to Principle 6. The department has a good quality assurance system for the audit, internal and external evaluation of this PSP.

Panel Judgement

Principle 6: Initial Internal and External Evaluation and Monitoring of New Postgraduate Study Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

1. Appoint a rotating student and an external evaluator on the PSP coordinating committee. This may not be a legal requirement but it is best practice in the continuous pursue of excellence.
2. Merge the coordinating and joint coordinating committees into one committee.

PART C: CONCLUSIONS

I. Features of Good Practice

The serious involvement and commitment of Pharmathen SA to support this PSP is a major advantage.

The provision made for students of diverse scientific backgrounds to prepare themselves for this PSP through a “Preparation Cycle” before the programme begins thus ensuring that all participants acquire the necessary basic knowledge to follow the course is excellent practice.

The “Entrepreneurship and Innovation Workshop” to introduce students of this PSP to fundamental concepts of innovation in Pharmaceutical Biotechnology is excellent practice.

Students have their fees covered in full by the PSP.

II. Areas of Weakness

The current Thesis policy allows “soft, non-research activities” e.g. literature reviews. The student workload and relative ECTS allocations are rather vague.

The Governance structure of the PSP lacks student and external expert representations.

The PSP website is incomplete.

Having a Coordinating Committee and a separate partially overlapping Joint Coordinating Committee is rather dysfunctional.

III. Recommendations for Follow-up Actions

Revise the thesis policy: Amend the current policy to require that all MSc theses are based on original research, involving experimental or applied investigation. Literature reviews should not be accepted as standalone thesis submissions. This revision will ensure compliance with EQF Level 7 standards, enhance the academic standing of the programme, and promote the acquisition of essential scientific skills.

Clarify student workload and ECTS allocation: Provide a more detailed and transparent breakdown of the student workload, detailing contact hours, self-directed learning, assignments, and group work. This should be explicitly linked to the ECTS credit allocation in accordance with EQF Level 7 descriptors, thereby supporting both quality assurance and student clarity.

Appoint a rotating student and an external evaluator on the PSP coordinating committee. This may not be a legal requirement but it is best practice in the continuous pursue of excellence.

Merge the Coordinating and Joint Coordinating Committees into one Committee.

Include biographical information, publications and research grant awards for individual staff on the PSP website in a uniform format.

IV. Summary & Overall Assessment

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

The Principles where substantial compliance has been achieved are: **1, 2 and 3.**

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

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

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

The members of the External Evaluation & Accreditation Panel

Name and Surname

Soultanas Panagiotis
CHRISTOPHIDES GEORGE
FOTAKI NIKOLETTA
Mystridis Georgios

Signature

Signed by Soultanas Panagiotis
Signed by CHRISTOPHIDES GEORGE
Signed by FOTAKI NIKOLETTA
Signed by Mystridis Georgios