



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ  
HELLENIC REPUBLIC



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# Accreditation Report for the New Postgraduate Study Programme on:

**Applied Bioinformatics - Biological Data Analysis**

**Institution: Democritus University of Thrace**

**Department: Molecular Biology and Genetics**

**Date: December 2025**



Με τη συγχρηματοδότηση  
της Ευρωπαϊκής Ένωσης



Πρόγραμμα  
Ανθρώπινο Δυναμικό και  
Κοινωνική Συνοχή



Report of the External Evaluation & Accreditation Panel appointed by the  
HAHE to undertake the review of the New Postgraduate Study  
Programme of **Applied Bioinformatics - Biological Data Analysis** 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 External Evaluation & Accreditation Panel responsible for the Accreditation Review of the new postgraduate study programme of **Applied Bioinformatics - Biological Data Analysis** of the **Democritus University of Thrace** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Law 4653/2020:

- 1. Dr. KTISTAKIS NICHOLAS** (Chair)  
Babraham Institute, United Kingdom
- 2. Dr. Roussakis Andreas Antonios**  
Imperial College London / Imperial College Healthcare NHS Trust, United Kingdom
- 3. Prof. Soultanas Panagiotis**  
University of Nottingham, United Kingdom
- 4. Prof. Veves Aristidis**  
Harvard Medical School, United States of America
- 5. Mr. ΔΡΟΣΟΣ ΠΑΝΑΓΙΩΤΗΣ**  
University of West Attica, Greece

## II. Review Procedure and Documentation

The review was conducted between 1/12/2025 and 6/12/2025.

On 1/12/2025 the External Evaluation & Accreditation Panel met privately to discuss early impressions of the PSP as deduced from the submitted documents and to assign the writing of different principles to the External Evaluation & Accreditation Panel members.

On 2/12/2025 the External Evaluation & Accreditation Panel held a series of meetings with various officers and stakeholders of the PSP as follows:

16:00 - 17:00 Meeting with the Vice-Rector/President of MODIP, the Head of the Department, the Director of the PSP, MODIP Supervisor: Vice-Rector & MODIP President: Professor Marirena Grigoriou; Head of the Department: Associate Professor Nicolas Glykos; Director of the PSP: Professor Aristotelis C. Papageorgiou; MODIP staff: Mrs. Styliani Gkavaki.

17:00 - 18:00 Meeting with the teaching staff: Prof. Ioannis Tokatlidis - MBG/DUTH; Prof. Ioannis Karafyllidis - EE&CE/DUTH; Prof. Ioannis Boutalis - EE&CE/DUTH; Prof. Pavlos Efraimidis - EE&CE/DUTH; Prof. Nikolaos Mitianoudis - EE&CE/DUTH; Assoc. Prof. Vasiliki Fadoulouglou- MBG/DUTH; Assoc. Prof. Georgios Skavdis- MBG/DUTH; Assoc. Prof. Antonis Giannakakis- MBG/DUTH; Assis. Prof. Aikaterini Palaiologou- MBG/DUTH; Assis. Prof. Marianthi Georgitsi- MBG/DUTH.

18:00 - 18:30 On-line tour of facilities and meeting with teaching staff Assis. Prof. Petros Kolovos and with administrative staff, Mr. Dimitrios Asimakopoulos and Dr. Chrysa Tsikrikoni.

19:00 - 20:00 Meeting with employers, social partners: Dr. Fotis Psomopoulos, Chair of the Scientific Council of the Institute of Applied Biosciences (INAB), Centre for Research and Technology Hellas (CERTH), Deputy Head of Node ELXIIR-GR; Dr. Constantinos Tsigenopoulos, Institute of Marine Biology, Biotechnology and Aquaculture (IMBBC), Hellenic Centre for Marine Research (HCMR), Head of Bioinformatics Division & National Representative at the European Reference Genome Atlas (ERGA); Dr. Maria Klapa, Foundation for Research and Technology Hellas / Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Head of Metabolic Engineering and Systems Biology Lab (MESBL), Research Director & Deputy Head of Node ELXIIR-GR; Dr. Grigorios Krey, Fisheries Research Institute (FRI), HELLENIC Agricultural Organization, (ELGO – DEMETER), Director; Dr. Achilleas Papatheodorou, Embryolab Fertility Clinic, Next Gen IVF Lab, Director; Dr. Anthoula Chatziykiakidou, Head of the Genetics Unit at "Papageorgiou" General Hospital of Thessaloniki.

20:30 - 21:00 Closure meeting with the Vice-Rector, the Director of the PSP, the Head of the Department, MODIP Supervisor.

The documents prepared by the PSP and examined by the External Evaluation & Accreditation Panel before, during and after the visit were as follows:

A0.\_new. Πίνακας Περιεχομένων Φακέλου ΝΠΜΣ.pdf

A1.\_new. Πρόταση Πιστοποίησης\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf

A2. Απόφαση Συγκλήτου Ίδρυσης ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf

A3. Εισηγ. Έκθεση ΜΟΔΙΠ\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf

A4. Απόφαση Συγκλήτου Στρατ. Ιδρύματος\_ΝΠΜΣ.pdf

A5. Μελέτες Σκοπιμ.Βιωσιμ\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf  
A6.\_new. Πολιτική Ποιότητας.pdf  
A7.\_new. Στοχοθεσία Ποιότητας\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf  
A8. Οδηγός Σπουδών ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf  
A9. Περιγράμματα Μαθημάτων ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf  
A10. Ονομαστ.Κατ.Διδασκ.Προσωπικού\_ΝΠΜΣ.pdf  
A11. Εσ. Κανονισμ.Λειτουργίας\_ΝΠΜΣ.pdf  
A12. Κανονισμ.Σπουδών\_ΝΠΜΣ.pdf  
A13. Κανονισμ.Διαχ.Παραπόνων\_ΝΠΜΣ.pdf  
A14. Κανονισμ.Θ.Α.Σ\_ΝΠΜΣ.pdf  
A15.\_new.Κανονισμ.Δεοντ.Έρευνας\_ΝΠΜΣ.pdf  
A16. Υπόδειγμα Διπλώματος\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf  
A17. Αναφ.Επιδ.Διδ.Προσωπ\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf  
A18. Κανον.Ηλεκτρ.Μάθηση\_ΝΠΜΣ.pdf  
A19. Σχ.Αξιοπ.Διδάκτρων\_ΝΠΜΣ ΕΒΠ-ΑΒΔ.pdf

The External Evaluation & Accreditation Panel congratulates the PSP because the documents that were submitted for this evaluation were up to date, informative and accurate, reflecting the current reality of the PSP.

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

The Democritus University of Thrace (DUTH) is home to 10 schools with a total of 28 departments and a student population of over 47000. There are also over 750 faculty and research personnel all scattered along most major cities in Eastern Macedonia and Thrace. The University enjoys strong support from the central government due to its relative remoteness but extreme importance in the Greek ecosystem.

The Department of Molecular Biology and Genetics at the Democritus University of Thrace is a relatively new department which has been evaluated highly in previous department-specific evaluations. It is composed of a relatively small number of faculty (23) with strong academic credentials. The current PSP – if positively evaluated – will be the 5th offered from the department alone whereas an additional one is offered across departments. In this sense, the current PSP does not introduce exorbitant teaching load to the faculty members. The current PSP on “Applied Bioinformatics-Biological Data Analysis” is a one full year programme of 75 ECTS with a mandatory thesis undertaken during the last, summer, semester. It will award an MSc degree. The PSP aims to train its students in data analysis as it relates to bioinformatics and by employing faculty from the electrical engineering department it also aims to introduce the students to methods of deep learning and the development of AI algorithms for solving problems in bioinformatics and in mathematical modelling. As stated on the website, “Concepts related to UNIX programming and the shell, R and R-studio (basic commands, data frames, functions and charts), Python (data and variable types, functions and modules) are explained and examples of programming, statistical analyses with R and Python and troubleshooting in the use of these tools are presented.”

The PSP aims to have a maximum of approximately 20 students. At present, it will accept graduates from most science fields including biomedicine, physics, chemistry and math. Some introductory courses will try to bring this potential heterogeneous student cohort to a similar level of knowledge. The total cost of the PSP is 2500 euros; the majority of this income will be spent on salaries for the teaching and the administrative staff.

The teaching mode of the PSP will be 25% in person, 50% remotely synchronously and 25% remotely asynchronously. The language of the teaching and learning will be in Greek although the majority of the primary literature and applications will be in English.

Employment opportunities for the graduates of this PSP are excellent, both in Greece and more specifically in biomedical fields using next generation sequencing for analysis of disease of genetic variability, as well as abroad where the profession of a bioinformatician is highly sought after.

## 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 External Evaluation & Accreditation Panel members reviewed submitted documentation alongside points made in the live interviews with the Course Director, Lead Academics and DUTH Senior Managers.

The institutional strategy explicitly supports the development and delivery of high-quality postgraduate programmes setting the scene for academic excellence. DUTH prioritizes innovation and digital transformation which aim to modernize the delivery of a wide range of educational activities in the Department, and support individuals interested in Applied Bioinformatics.

The design of the PSP is linked to DUTH's strategic goals and aligns with emerging scientific, community, and industry needs. The PSP is designed to be delivered largely remotely; up to 75% of educational activities can be held from afar combining synchronous and asynchronous methods for teaching and learning. The Department is sufficiently equipped and staffed to support all educational activities in both virtual and face-to-face environments.

The Quality Assurance (QA) Policy, outlined in document A6, demonstrates that the PSP Leads are committed to (a) meeting the advances of the scientific community with up-to-date research, training and teaching methodology, (b) ensuring that the students meet the desired learning outcomes on track and

timely for qualification, (c) promoting the development of novel scientific knowledge and research, and (d) giving students the opportunity to have practical and hands-on new experiences. The Policy explains how the various academic roles in the Department will ensure high quality in the delivery of educational and research activities, and the mechanisms that are in place for continuous improvement. Additionally, the Policy commits to efficient and responsible use of financial resources associated with this PSP, ensuring transparency and sustainability.

The Policy will become public, on the PSP website, to inform students, faculty members, administrators and managers, as well as third parties including collaborators and partners. Communication of policy pillars and strategic goals extends beyond formal documentation, to departmental meetings, induction sessions, and digital platforms. This approach ensures shared understanding, consistency and active engagement of all parties in quality enhancement processes.

Goal-setting and KPIs are included in document A7. In submitted documentation, the PSP is set to have four (4) strategic goals. These include: (a) increased openness to the local society / enhanced community work, (b) and (c) continuous support for stronger and upgraded educational processes – documented twice, and (d. internationalization and extroversion. Timelines refer to annual review cycles. The PSP has seven (7) S.M.A.R.T. goals and ten (10) respective KPIs which are aligned with the strategic goals. Examples include student progression and completion rates, students participating as co-authors, teaching contributions from other Departments. These KPIs provide reliable data for evidence-driven quality enhancement.

The learning outcomes, as those are currently presented for review, are aligned with Level 7 descriptors of the European and National Qualifications Frameworks. They offer advanced theoretical and practical knowledge on data management and processing, critical integration of computational and biological concepts, whilst supporting students to gain new skills as independent researchers and young professionals in bioinformatics.

## **II. Analysis**

The above points indicate a well-structured PSP that is strategically aligned with DUTH's institutional priorities and broader scientific needs. The PSP's strong orientation toward innovation, digital delivery, and distance learning shows operational readiness and a high level of flexibility which correspond to contemporary educational demands.

The PSP has well-defined mechanisms for quality improvements, and a transparent approach to policy communication with appropriate goals in place and relevant KPIs. Alignment of learning outcomes with Level 7 frameworks further supports the PSP's core design and the vision of the Course Director to develop competent, research-ready professionals in Bioinformatics.

### III. Conclusions

The External Evaluation & Accreditation Panel members feel that the PSP is fully compliant with Principle 1.

#### Panel Judgement

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

#### Panel Recommendations

-Consider adding two new KPIs aligned with the internationalization and extroversion strategic goal: (1) exploring the development of an Anglophone version of the PSP to attract non-Greek-speaking students from Greece and abroad, and (2) promoting student mobility through Erasmus+ and other relevant cross-institutional partnerships.

-Review the wording in the quality goals and KPIs columns and add new text / change wording to improve clarity and precision.

-Correct the repetition error identified in the list of strategic goals.

## 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 PSP is structured in three cycles, two semesters and a summer term lasting one whole year. The first two semesters comprise of compulsory core courses, and each semester is worth 30 ECTS. These courses cover a wide range of essential topics starting with the Principles of Bioinformatics (20 ECTS), Fundamental Knowledge (10 ECTS) in the first semester, extending to Principles of Data Analysis (10 ECTS), Bioinformatics and Data Analysis Applications (5 ECTS), and finally the Methodology for Postgraduate Diploma Thesis (15 ECTS). The latter is taken in preparation for the Diploma Thesis which is carried out during the summer term and is worth 15 ECTS. The total ECTS required for successful completion of this PSP is 75. Up to 75% of the teaching can be delivered remotely via synchronous and asynchronous methods with the rest of the teaching being in person. Teaching will be done mainly in Greek but can also be done in English, if appropriate. Equally, the final Diploma Thesis can be written in Greek or English. The expected learning outcomes are explained in detail in the Course Outline document and are consistent with European and National Qualifications Framework (EQF, NQF), and the Dublin Descriptors for level 7. Graduates from this PSP should know and understand how basic concepts and principles of Bioinformatics and Data Analysis are connected to biological fields. They should be able to collect, process, evaluate and interpret biological data using appropriate methods to solve any problems that may arise using critical and analytical thinking. Emphasis is also placed on appreciating ethical issues arising from the applications of collecting and processing biological data, and on handling such issues with social sensitivity avoiding discrimination and prejudice. Fees have been set at 2,500 euros and will be paid in two installments, one at the beginning of the autumn semester and the second at the beginning of the summer semester.

The PSP teaching staff is relatively focused, including 14 staff that contribute directly to the PSP. Their expertise covers biological sciences with emphasis on molecular biology and genetics, and the broad area of informatics. The staff comes mainly from two departments within the DUTH, the department of Molecular Biology and Genetics (10 staff) and the department of Electrical Engineering and Computer Engineering (4 staff). Some teaching needs may also be covered through distinguished scientists who pursue careers in other universities, research institutions and industry nationally or internationally.

The design of this PSP included a significant amount of feedback collected from external stakeholders, including representatives from research institutions, relevant departments from other universities, scientific and professional

associations and networks, as well as graduates from other relevant postgraduate programs. This feedback was based on interviews, and the collective data was gathered, analyzed and considered in the final design of this PSP. The content of the courses offered is oriented towards deepening the knowledge of students in the field of Applied Bioinformatics and Biological Data with the concomitant acquisition of the necessary relevant practical skills through hands-on workshops and the final Diploma Thesis research. The PSP offers the possibility of student internships but only on an ad hoc basis and as an optional activity rather than as an organized educational activity.

The PSP has been designed through a well-coordinated process in accordance with the current legal framework as detailed in the provisions of law 4957/2022 (A' 141) for its establishment. The Senate initially recommended the establishment of this PSP in line with the law 135557/Z1/01-11-2022 for the establishment of new PSPs, pending the evaluation and final approval of the PSP by HAHE.

## **II. Analysis**

This PSP is supported by excellent facilities in the participating departments and benefits from well-focused, highly skilled and knowledgeable staff. It is important to avoid increased staff proliferation with large numbers of contributors contributing only minor fragmented bits of knowledge. This PSP has managed to avoid this issue. Staff teaching load in this PSP is acceptable with an average of 6,5 hours per week (maximum 11,23 and minimum 2,95 hours per week). Remote teaching is designed to be a maximum of 75% in this PSP, including synchronous and asynchronous teaching, and is delivered mainly in concentrated form during certain weekends. This teaching format may be a problem, for example students may struggle to maintain their concentration in an 8-hour remote session, despite the flexibility it offers for students who may also be engaged in jobs and other activities during weekdays. It is good that 25% of teaching is in face to face format which would be important for students to form interpersonal relationships with fellow students and teachers. Student mobility is possible through the usual Erasmus programs and internships are also possible on an ad hoc basis. These activities should be better advertised for students of this PSP, ideally via the PSP website so that all can become aware of the possibilities offered. The department should also be more proactive to secure some internships every year with stakeholders and external partners to offer to incoming students.

The PSP aims to attract students mainly with an interest in biological directions, life sciences, medicine, pharmacy, veterinary medicine, but also students from wider fields such as geotechnical and environmental sciences, computer science, mathematics, applied bioinformatics and polytechnic schools. This reflects the emerging need for interdisciplinarity in the fast-developing field of biological data analysis and bioinformatics. The global bioinformatics market is expected to keep growing at a fast pace of 13,7% annually according to the World Health

Organization, incorporating advances in genomics, proteomics, metabolomics, and new information technologies. This is also reflected nationally within Greece where it is expected specialized personnel with qualifications corresponding to those provided by this PSP will be in increasing demand in the future as the state and private health sectors adapt and adopt new technologies in diagnostics and treatment. The maximum number of students anticipated for this PSP is 25 per cohort. There is no plan to increase this number further as this is deemed to be the optimum number of students the department can support for this PSP.

The PSP course content is comprehensive with emphasis on practical training, but more details should be provided for the content of each course in the course outline documentation provided to students. It would be good to incorporate at this early-stage topics on stratified and personalized medicine (e.g. how certain biomarkers could be utilized for patient stratification to guide treatment for better patient outcomes etc.) and artificial intelligence (e.g. applications of AI in diagnostics, in image analysis etc.). These are important fast developing topics at the core of Applied Bioinformatics and Biological Data analysis that will change and define the biology and medicine of the future.

Active involvement of students in shaping the course content is envisioned via the usual student evaluation of courses through online questionnaires that students will be completing at the end of each course. In addition, the PSP is doing its own separate questionnaire to gather additional data to continuously revise the course content and the teaching and assessment methods to address the needs of students. However, there does not seem to be a formal mechanism of peer review of teaching from fellow staff. This is something that should be considered for this PSP and widely for the whole department. It is good academic practice in the pursuit of teaching excellence.

Staff are on the whole research active and their research activities are expected to feed teaching and course content in this PSP. The Diploma Thesis at the end should be a great vehicle to link this PSP directly to research. Prior to starting their work for the Diploma Thesis students will be taking a course in the second semester on the Postgraduate Thesis Methodology to be taught how to carry out effective literature searches, how to collect research data, using it and modifying it through appropriate tools and workflows for analyses and training. This is a positive as it will help students to understand and better define the research question they will be researching during their Diploma Thesis work. However, there does not seem to exist a Diploma Thesis Handbook that will give students essential details how to write the thesis e.g. what fonts to use, what should the word count limit should be, how to construct good publication quality images, what statistics to use and how to report their statistical analyses, what the format of the references should be, how not to engage in plagiarism and copy/paste of images and data from web sources etc.

Also, the assessment of the Diploma Thesis in the course outline document states “oral examination by the committee”. If that is the case then to have all the marks allocated for the Diploma Thesis through a final oral exam is unacceptable. Marks should be allocated more widely through assessment of the “Introduction” (i.e. the literature review that is likely to be in the introduction), the “Methodology” (i.e. is it explained clearly and succinctly?), the quality of the written text throughout, the quality of Data, images, tables and Data analyses, the drafting of clear conclusions, the future work that could be needed, an oral presentation etc. The External Evaluation & Accreditation Panel suggests that a clear and more detailed marking scheme for the Diploma Thesis should be presented to students and this should be in a Thesis Handbook alongside other necessary information.

Equally, the course contents presented for each course in the course outline document seem to be rather summative and should include more details. The External Evaluation & Accreditation Panel suggests that for each course the content of each lecture should be included in the course content to provide complete and detailed information.

### III. Conclusions

This is a good PSP in a topical and important topic that is fast developing and evolving nationally and internationally. It is perfectly aligned with the strategic objectives of the DUTH and has been designed and structured following well-set procedures in accordance with existing legislation and good academic practices. Minor tweaks will be needed to improve the content, information provided to students and feedback practices as suggested below in the Panel recommendations. The External Evaluation & Accreditation Panel considers this PSP to be substantially compliant.

#### Panel Judgement

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

#### Panel Recommendations

Include lectures on stratified/personalized medicine and AI e.g., how can these lead to better diagnostics and more effective/targeted therapies with less toxicity.

Produce a Thesis Handbook.



Revise the marking scheme for the Diploma Thesis and communicate the marking scheme to students through the Thesis Handbook and the course outlines.

Revise the course contents in the course outline document to provide complete and detailed information to students.

Introduce a formal annual peer review of teaching scheme.

Communicate and advertise better the available mobility schemes and internship opportunities to incoming students.

Liaise with external partners and stake holders annually to agree on several internships that will be offered to incoming students each year.

### **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**

PSP will accept graduate students from various scientific fields, including bioscience, informatics, computer engineering, mathematics and agriculture.

Candidates will be accepted after oral interview. Main acceptance criteria include previous research or teaching experience, publication and satisfactory knowledge of the English language.

The maximum number of students that was approved by the University Senate is 30 and the minimum 12. Of note, during the discussion with the PSP leadership, the maximum number of students was reported 25.

Fellowships will be available to a small number of students based on merit or social needs.

Provisions are made for part-time participation or extension of the study time for students who may not be able to follow the whole one-year PSP educational program.

Progress will be based on students' performance during the program, written exams at the end of each course and oral presentation of the MSc Thesis.

### **II. Analysis**

Students will come from various scientific fields, something that can result in a nonhomogeneous group. This is not surprising given the fact that bioinformatics is applicable to various professional and educational activities. This issue was discussed in detail with the programme officials.

The proposed student recruitment and follow-up plans are appropriate.

It was realized that in the decision that was published in the government gazette (ΦΕΚ) it is mentioned that any type of graduate could be candidates for the program. However, during the discussion with the programme officials it was clarified that this was not the case and that only candidates from the various scientific fields mentioned above, which are relevant to the PSP, will be considered.

### **III. Conclusions**

Overall, the PSP regulations regarding students' acceptance and training are appropriate and according to national and international standards for similar programs.

### Panel Judgement

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

### Panel Recommendations

It is recommended that preparatory courses are provided to students from fields that have not exposed them to the required knowledge regarding important areas related to PSP, e.g. principles of biology for students with undergraduate studies in computer engineering.

Efforts should be made so the recruited group of students is not severely nonhomogeneous as this can have a major effect on the progress of their studies.

## 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 teaching staff is comprised of members of the faculty of the Department of Molecular Biology and Genetics and the Department of Electrical and Computer Engineering of DUTH.

The total number of teaching staff is 14. Their teaching responsibilities are clearly described and are very relevant to their expertise.

Information was provided regarding the exact role and engagement of each member of the teaching staff.

#### **II. Analysis**

The quality of the teaching staff is outstanding. The vast majority of them have considerable teaching and research experience and have spent significant time of their career in recognized academic institutions abroad.

A major strength of the PSP is the small number of the teaching staff and the fact that they work in close proximity in only two Departments. This can help them to develop a strong and functional structure that can adequately supervise the students and provide them with excellent training.

Further to the above, the time dedicated by the teaching staff to the PSP is considerable and appropriate, something that can lead to appropriate connection with the students and provide them with the necessary supervision.

During the meeting of External Evaluation & Accreditation Panel with the teaching staff, External Evaluation & Accreditation Panel recognized the willingness of the teaching staff to take ownership of the PSP and lead it to a successful outcome.

One minor concern is that if the teaching staff is involved in the considerable number of other PSPs this can lead to dilution of responsibility and limit their participation in the current PSP.

### **III. Conclusions**

Overall, the teaching staff is of high quality and can satisfactorily perform all teaching and student supervising activities that are required for establishing a high-quality PSP

#### **Panel Judgement**

| <b>Principle 4: Teaching Staff of New Postgraduate Study Programmes</b> |          |
|-------------------------------------------------------------------------|----------|
| Fully compliant                                                         | <b>X</b> |
| Substantially compliant                                                 |          |
| Partially compliant                                                     |          |
| Non-compliant                                                           |          |

#### **Panel Recommendations**

It is recommended that each member of the teaching staff limits his/her participation to a small number of PSPs.

## 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 PSP operates within a comprehensive academic environment supported by modern educational, computational and research facilities. The Department provides access to fully equipped classrooms, two laboratory teaching rooms, a computer room with 34 modern systems, as well as a virtual reality room.

All teaching rooms are equipped with internet access, digital projectors and tools enabling both in-person and distance learning.

In addition, the research laboratories of the Department host state-of-the-art molecular and computational equipment obtained through national and

European competitive funding schemes, ensuring that students have access to advanced resources relevant to the program's scientific scope. Students have access to the institutional Library and Information Centre of DUTH, including the Health Sciences Library, which provides reading rooms, electronic databases, bibliographic search tools and borrowing services. Further academic support is provided through the e-Class platform for asynchronous teaching, MS Teams for synchronous sessions, and institutional email accounts. Students also benefit from the University's Microsoft 365 services, including Office applications, OneDrive storage and remote collaboration tools.

Administrative and secretarial support is delivered through the Department Secretariat, which manages student documentation, academic records, certificate issuance, and everyday administrative processes. Students access the Electronic Secretariat (Universis) to manage course registration, grades and academic requests. Additional services include student dining facilities, healthcare coverage according to national provisions and an emergency phone line (11314) for urgent incidents within the campus environment.

The programme adopts the institution's system of student support, which comprises the Academic Advisor scheme, the Counselling and Psychological Support Centre (KEPSYSY-DUTH) and services ensuring accessibility for students with disabilities. Students also have access to the Career Office, the Employment and Career Structure (DASTA), innovation and entrepreneurship services, and platforms providing guidance for academic writing and linguistic editing such as Philologus. Scholarships and awards are available annually, according to university and programme regulations.

A framework for the allocation of tuition fees ensures that resources are directed to improving teaching quality, enhancing research activities, supporting administrative and technical functions, offering scholarships and maintaining equipment essential for the program's operation. This financial planning supports both sustainability and continuous improvement of the postgraduate programme.

## **II. Analysis**

The learning resources and student support services available to the PSP demonstrate strong alignment with the expectations of a modern postgraduate programme in a highly technical field.

The combination of well-equipped teaching rooms, specialized laboratories, and robust digital infrastructure creates an environment conducive to both foundational learning and advanced bioinformatics training. The availability of computing facilities and software applications is particularly important given the data-intensive nature of the programme. The integration of e-learning platforms



and administrative digital tools supports flexible and efficient academic management, enhancing students' autonomy and reducing administrative burden. The presence of dedicated counselling, accessibility services and academic advising mechanisms ensures that individual student needs are addressed academically, professionally and psychologically. This holistic support framework contributes to student retention, wellbeing and successful academic progression.

Career development structures such as DASTA and the Career Office provide students with exposure to professional pathways, networking opportunities and employability guidance, complementing the program's scientific orientation. The availability of linguistic editing services through Philologus strengthens academic writing quality.

The administrative staff are adequately trained, ensuring smooth coordination of academic and logistical processes. The tuition fee utilization plan demonstrates a strategic approach to resource management, prioritizing improvements in teaching quality, research output and student support. Overall, the program's learning resources and student support systems are well organized, extensive and fully appropriate for the scope and demands of postgraduate education in applied bioinformatics.

### **III. Conclusions**

The PSP employs best practices in the provision of learning resources and student support. The programme benefits from strong physical and digital infrastructure, state-of-the-art laboratory facilities, comprehensive administrative mechanisms and a wide range of academic and psychosocial support services. Students have consistent access to technical resources, modern teaching environments, career development structures and counselling provisions, ensuring a high-quality and well-rounded academic experience.

The breadth and quality of facilities, together with effective administrative operations and an inclusive support framework, are considered highly appropriate and contemporary. The program's connection to institutional services and research infrastructures enhances opportunities for academic growth and professional development. Overall, the programme demonstrates full compliance with the Principle concerning Learning Resources and Student Support.

### Panel Judgement

| Principle 5: Learning Resources and Student Support |          |
|-----------------------------------------------------|----------|
| Fully compliant                                     | <b>X</b> |
| Substantially compliant                             |          |
| Partially compliant                                 |          |
| Non-compliant                                       |          |

### Panel Recommendations

None

## 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 Quality Assurance Unit (MODIP) at DUTH implements an annual internal monitoring plan. This plan evaluates the teaching curriculum and makes necessary adjustments to all Postgraduate Study Programmes, including the one under review. The findings from this work are reported in detail in document A3. The authors of the report find the process of organizing this PSP and its intended academic structure to be compatible with the aims of DUTH as a whole and with the academic interests of the Department of Molecular Biology and Genetics which will host the PSP.

The MODIP of the DUTH has done a good job going through the initial review and evaluation of this PSP and the final submitted documents for the evaluation were of high quality.

Within these documents, MODIP seems to have a grasp of the processes to be followed: there is mention of students' feedback and how this is going to be used to steer the future of this PSP, as well as metrics for the research, teaching, involvement of external stakeholders, etc.

## **II. Analysis**

A SWOT analysis of the intended structure and function of this PSP would have been helpful, but even without it critical aspects such as its competitiveness and the employability of its graduates have been discussed and considered.

The DUTH as a whole has shown that it takes the process of internal evaluation very seriously, and it tries to rectify points of criticism that have come up in external evaluations. The External Evaluation & Accreditation Panel has no doubt that this process (from internal evaluation leading to improvement to external evaluation and addressing of matters arising) will continue to be followed carefully.

It is expected that students will evaluate the quality of the teaching process of the PSP both directly and indirectly, through formal and informal mechanisms including the completion of feedback questionnaires. Improvements can be made as the programme matures and matters arising are addressed including perhaps (a) the increase of graduation rate with each cohort, (b) the percentage of students who reached out to the Academic Advisor during their studies, (c) the percentage of students who actively participate in evaluation, (d) the mean score (provided by the students) about the subjects and the marks for tutors, (e) the percentage of graduates who continued with postgraduate studies at a PhD level, and (f) the number of seminars and invited talks.

## **III. Conclusions**

The External Evaluation & Accreditation Panel is certain that the principle, or rather the necessity, of internal and external evaluation of this PSP and the department in general will continue to be robustly followed and this will lead to improvements of both.

### 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

A SWOT analysis would be useful

## **PART C: CONCLUSIONS**

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

A well-structured PSP that is strategically aligned with DUTH's institutional priorities and broader scientific needs.

The PSP has well-defined mechanisms for quality improvements, and a transparent approach to policy communication with appropriate goals in place and relevant KPIs.

This PSP is supported by excellent facilities in the participating departments and benefits from well-focused, highly skilled and knowledgeable staff.

The proposed student recruitment and follow-up plans are appropriate.

The vast majority of the faculty have considerable teaching and research experience and have spent significant time of their career in recognized academic institutions abroad.

A major strength of the PSP is the small number of the teaching staff and the fact that they work in close proximity in only two Departments.

The External Evaluation & Accreditation Panel noted the willingness of the teaching staff to take ownership of the PSP and lead it to a successful outcome.

The integration of e-learning platforms and administrative digital tools supports flexible and efficient academic management, enhancing students' autonomy and reducing administrative burden.

Students of the PSP will have consistent access to technical resources, modern teaching environments, career development structures and counselling provisions, ensuring a high-quality and well-rounded academic experience.

The DUTH as a whole has shown that it takes the process of internal evaluation very seriously, and it tries to rectify points of criticism that have come up in external evaluations.

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

Course outline documentation provided to students was not detailed enough. Marking scheme for the Diploma Thesis was not detailed enough. Heterogeneity of student body could create some problems in the teaching aspect.

The small number of teaching staff of the Department will always require care on how many PSPs it can support current numbers are likely optimal.

No SWOT analysis was done

Large number of bioinformatics PSPs in Greece may limit applications to the current one.

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

Consider adding two new KPIs aligned with the internationalization and extroversion strategic goal: (1) exploring the development of an Anglophone version of the PSP to attract non-Greek-speaking students from Greece and abroad, and (2) promoting student mobility through Erasmus+ and other relevant cross-institutional partnerships.

Review the wording in the quality goals and KPIs columns and add new text / change wording to improve clarity and precision.

Correct the repetition error identified in the list of strategic goals.

Include lectures on stratified/personalized medicine and AI e.g., how can these lead to better diagnostics and more effective/targeted therapies with less toxicity.

Produce a Thesis Handbook.

Revise the marking scheme for the Diploma Thesis and communicate the marking scheme to students through the Thesis Handbook and the course outlines.

Revise the course contents in the course outline document to provide complete and detailed information to students.

Introduce a formal annual peer review of teaching scheme.

Communicate and advertise better the available mobility schemes and internship opportunities to incoming students.

Liaise with external partners and stake holders annually to agree on several internships that will be offered to incoming students each year.

It is recommended that preparatory courses are provided to students from fields that have not exposed them to the required knowledge regarding important areas related to PSP, e.g. principles of biology for students with undergraduate studies in computer engineering.

Efforts should be made so the recruited group of students is not severely nonhomogeneous as this can have a major effect on the progress of their studies.

It is recommended that each member of the teaching staff limits his/her participation to a small number of PSPs.

A SWOT analysis would be useful

#### IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 3, 4, 5, 6**

The Principles where substantial compliance has been achieved are: **2**

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

| <b>Name and Surname</b>    | <b>Signature</b>                        |
|----------------------------|-----------------------------------------|
| KTISTAKIS NICHOLAS         | Signed by KTISTAKIS<br>NICHOLAS         |
| Roussakis Andreas Antonios | Signed by Roussakis<br>Andreas Antonios |
| Soultanas Panagiotis       | Signed by Soultanas<br>Panagiotis       |
| Veves Aristidis            | Signed by Veves<br>Aristidis            |
| ΔΡΟΣΟΣ ΠΑΝΑΓΙΩΤΗΣ          | Signed by ΔΡΟΣΟΣ<br>ΠΑΝΑΓΙΩΤΗΣ          |