



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ  
HELLENIC REPUBLIC



Εθνική Αρχή  
Ανώτατης Εκπαίδευσης  
Hellenic Authority  
for Higher Education

# **Accreditation Report**

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

### **Biomedical Engineering and Technology**

Department: Biomedicine Engineering  
Institution: University of Western Attica  
Date: 26/01/2025



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 Postgraduate Study Programme of **Biomedical Engineering and  
Technology** of the **University of Western Attica** for the purposes of  
granting accreditation

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

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

The Panel responsible for the Accreditation Review of the postgraduate study programme of Biomedical Engineering and Technology of the **University of Western Attica** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. Dr Dimitrios Visvikis (Chair)  
National Institute of Health and Medical Research
2. Dr Fivos Andritsos  
European Commission, Joint Research Centre
3. Prof. Konstantin (Gus) Kousoulas  
School of Veterinary Medicine, Louisiana State University
4. κ. Νικόλαος Σαββόπουλος  
University of Patras
5. Prof. Nikolaos Xiros  
University of New Orleans: Bollinger School of Naval Architecture & Marine Engineering; Dept. of Electrical & Computer Engineering

## **II. Review Procedure and Documentation**

The panel used the documents that were made available through this website. At the same time the PSP stakeholders provided through a download link the presentations given on Monday (20/01/25) afternoon and some additional documents requested during this same meeting. Some panel members also demanded that the multiple documents available on this website be combined in a single pdf and sent through a similar download link.

The panel met for the first time during the first visioconference session with the PSP stakeholders on Monday (20/01/25) afternoon. A private zoom meeting between the panel members followed the end of the presentations on Monday afternoon. The objective of this meeting was to discuss preliminary impressions after the end of the first day presentations but also organise the work of the panel and the attribution of tasks to each of the panel's member. The panel met again during the second visioconference session with the different groups of the PSP stakeholders on Tuesday (21/01/25) afternoon. A final zoom visioconference meeting of the panel took place on Friday (24/01/25) afternoon to discuss the preliminary report version. All other consultations between panel members was carried out through emails exchanges.

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

The MSc program "Biomedical Engineering and Technology" is organised by the Department of Biomedical Engineering which belongs to the School of Engineering of the University of West Attica. The Department of Biomedical Engineering (supervising Department of the Mac program "Biomedical Engineering and Technology") was founded in 2018 with the establishment of the University of West Attica and is the evolution of the Department of Medical Instrument Technology, which was founded in 1985 at the Technological Educational Institute of Athens and renamed as the Department of Biomedical Engineering Technology in 2013.

The MSc program appeals to those holding a Bachelor's (B.Sc.) University degree related to engineering, technology, life, and health sciences or other relevant to biomedical engineering sciences, who wish for a career change in Biomedical Engineering. The program duration is three (3) academic semesters. During the first and second semesters, educational activities involve a/ classical lectures in the auditorium, b/ hands-on laboratories in specialized labs equipped with biomedical instruments, c/ field visits in companies, research facilities, and healthcare sites, d/ special seminars organized with the collaboration of the industry, and the labor market, and e/ personal and group assignments. The third semester involves the elaboration of the Diploma thesis, which comprises a full-scale research project.

The MSc is designed focusing on the extroversion of the Department and the University towards industry, the labour market and the international educational environment in the rapidly developing field of Biomedical Engineering and Technology. Biomedical Engineers can be employed in the private and public sectors to study, design, manufacture, install and commission, test, maintain and distribute medical devices, scientific instruments and machinery, as well as with the development and use of software for any type of application in the Life and Health Sciences. In public hospitals, there are positions for Biomedical Engineers and there is a high demand from medical equipment companies.

## PART B: COMPLIANCE WITH THE PRINCIPLES

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

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

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

*Indicatively, the quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the postgraduate study programme (PSP), its purpose and field of study; it will realise the programme's goals and it will determine the means and ways for attaining them; it will implement appropriate quality procedures, aiming at the programme's improvement.*

*In particular, in order to implement this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:*

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

#### **Documentation**

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

#### **Study Programme Compliance**

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

The University of West Attica (UNIWA) was founded in 2018 by merging the former Technological Educational Institute (TEI) of Athens with the Piraeus University of Applied Sciences and, in 2019, with National School of Public Health. Today, UNIWA hosts 27 Departments, organized into 6 Schools. The PSP in Biomedical Engineering and Technology (BMET), which is the object of the current accreditation, is under the Biomedical Engineering Department (BME), part of the UNIWA Engineering School.

The development and subsequent implementation of the PSP have been guided by

the BME and UNIWA relevant policies, following clear and well-defined procedures. In fact, the QA policies of the UNIWA were found fully compliant during its 2022 external accreditation.

The PSP is backed by an adequate sustainability analysis which promptly maps relevant risks and opportunities. All relevant documents are well-written and document very well all QA procedures according to the HAHE guidelines. The PSP correctly identifies the main risk, which has to do with the rather low demand for its offering.

The BMET PSP academic and support staff are well-qualified and seem passionate in their duties, which they perform without any special or additional retribution. The same is true about the small PSP student body.

## **II. Analysis**

The Biomedical Engineering and Technology PSP has all the prerequisites to fulfil all HAHE requirements, as listed in points (a.) through (i.) above. This is due to the quality and professionalism of all teaching and support staff as well as the well-established quality policy, procedures, and support services of the host institution. BMET is aware of the importance of tracking and liaise with its alumni and works towards establishing such relations.

The limited number of the PSP students, coupled with the dedication and availability of academic and support staff allows for effective informal communication and feedback. Understandably, this has caused a certain relaxation of formal communication and feedback mechanisms.

However, the rather limited BMET size, in terms of enrolled students, poses a great risk for its sustainability. Although BMET has identified correctly that risk, it has failed to identify the root causes and does not propose any measures to rectify the situation. In fact, both BMET as well as its host Department have not documented a clear set of specific goals and strategy other than the generic statements about high-quality education etc. Consequently, the PSP has not identified clearly enough the target space of its candidate students.

## **III. Conclusions**

The Biomedical Engineering and Technology PSP fulfils all HAHE QA requirements, as listed in points (a.) through (i.). However, to ensure its sustainability, BMET must elaborate and project a distinct identity and revise its strategy accordingly. Such strategy should provide answers to the following basic questions:



- What is the target space of the BMET incoming students
- What benefits should incoming students expect from the particular PSP
- What are the BMET specific advantages / differences from other similar offerings

This matter is also addressed in Principle 2 below.

### Panel Judgement

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

### Panel Recommendations

Better define the BMET audience target space. Elaborate on the potential benefits of the BMET offering and its specific advantages. Provide a clear vision/mission statement.

Take measures to accommodate some inevitable gaps in prerequisite knowledge, possibly through the obligation to follow existing graduate courses according to the background of each incoming student.

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

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

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

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

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

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

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

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

### **Documentation**

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

## **Study Programme Compliance**

### **I. Findings**

Although the technical quality of the documentation provided and the Department's web pages is very high, it completely lacks specific strategic goals other than the usual ones of providing high-level education, research etc. Such specific goals and targets were lacking also from the PSP presentations.

The courses are offered by teaching staff who are experts in their respective areas. There seem to be several links with relevant laboratories and research groups abroad as well as with some collaborating Greek Institutions. There are good links with Industry, mainly through former TEI alumni who now work in the field of biomedical instrumentation and services. However, these links are not formalized. The PSP programme is in line with the European Qualifications Framework (EQF) Level 7. The student workload also is in accordance with the European Credit Transfer and Accumulation System (ECTS) for Level 7. BMET claims to cover a very wide range of biomedical engineering disciplines (in vitro and in vivo diagnostics, medical imaging, emergency medicine and rehabilitation technologies, biomedical informatics, artificial intelligence, deep learning, ethics etc.) in just 2 semesters of courses.

The PSP documents are of very high quality and adhere to the Institution's general policies and to the relevant regulatory framework. Most of them are both in Greek and English language. All official procedures for the approval of the PSP by the Institution have been followed.

Finally, the Panel commends the BME academic and support staff for their laborious effort in organising and implementing the BMET PSP as well as for preparing the accreditation documents and presentations.

### **II. Analysis**

The BME department has a strong legacy that dates to its TEI roots, when it was the only Greek educational unit forming the technical staff for the biomedical instrumentation enterprises. Although BME claims to be the only Greek higher education engineering department in the field of biomedical technologies, nowadays, due to the economic and scientific importance of the sector, there is a growing number of University Departments and Laboratories active in the biomedical / bioengineering field, including, at least, 3 other PSPs in Greece with very similar application field and title.

It is understandable that, in its transition from its former TEI status, BME can claim a broader application field such as the biomedical engineering. However, the Panel is of the opinion that the BMET PSP is far too broad, and its title is too generic. Even so, it fails to cover adequately the broad range of disciplines involved in biomedical engineering, as can be expected by a curriculum limited to just two semesters. For example, the ever more important field of surgical robots is not covered at all. Moreover, the target audience of the PSP is poorly defined, in the sense that one must search in the text of the provided documents to realize what became apparent from the discussions with the BMET staff, that is that the PSP aims in providing graduates from various other fields with a broad range of biomedical engineering related disciplines. However, there are no measures on how to deal with the inevitable variety of needs from students of different backgrounds i.e. the medical rather than the engineering or the science graduates.

These are all results of the lack of specific goals and strategy quoted in Principle 1 as well as in section (I) above.

The small size of the PSP allows for a modern, interactive student-focused approach both to teaching and assessments.

The main concern of the Panel regards the rather limited PSP size, namely in terms of enrolled students. The root causes of this issue should be addressed primarily through specific planning, strategy and goal setting activities. If no effective measures for increasing the number of incoming students are taken, the PSP's sustainability will be at risk. Clearly identifying the target audience and providing a vision/mission statement will help recruiting both Greek and foreign students.

### **III. Conclusions**

BMET should elaborate on its goals, mission statement and strategy that, in their present form, are too generic.

Together with its host Institution, it must take urgent measures to substantially increase the incoming student base. One way could be that of conditioning the admittance of individual incoming students to the obligation to follow, according to their background, some undergraduate courses at the BME and other UNIWA departments. This could entail an additional introductory semester and/or some specific PSP study streams

The good relations with industry and other external stakeholders should be formalised through a dedicated advisory board.

A dedicated workshop could be a way to towards an updated strategic plan and the projection of a specific PSP identity.

### **Panel Judgement**

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

**Panel Recommendations**

Elaborate on the BMET title, identity, goals, and strategy, possibly through a dedicated workshop.

Establish a stakeholders' advisory board.

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

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

*Student-centred learning and teaching plays an important role in enhancing students' motivation, their self-evaluation, and their active participation in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.*

*The student-centred learning and teaching process*

- *respects and attends to the diversity of students and their needs by adopting flexible learning paths*
- *considers and uses different modes of delivery, where appropriate*
- *flexibly uses a variety of pedagogical methods*
- *regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement*
- *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys*
- *strengthens the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff*
- *promotes mutual respect in the student-teacher relationship*
- *applies appropriate procedures for dealing with the students' complaints*
- *provides counselling and guidance for the preparation of the thesis*

*In addition*

- *The academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field.*
- *The assessment criteria and methods are published in advance. The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process.*
- *Student assessment is conducted by more than one examiner, where possible.*
- *Assessment is consistent, fairly applied to all students and conducted in accordance with the stated procedures.*
- *A formal procedure for student appeals is in place.*
- *The function of the academic advisor runs smoothly.*

#### **Documentation**

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

#### **Study Programme Compliance**

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

This PSP at UNIWA requires students to complete 90 ECTS credits over the course of three semesters. Each course lasts between 2-4 weeks, with exams held after each course. The program is taught in English, aiming to attract international students, and includes lab exercises and practical training. There are 7 compulsory courses, along with a wide range of elective courses and a compulsory thesis. The Panel recommends grouping elective courses into specific trajectories to allow students to specialize in a particular field, as many students might not be familiar with Biomedical Engineering and Technology.

The program includes an exam period after each course, with re-examinations for winter and spring semester courses taking place in September. To qualify for exams, students must attend at least 80% of the course hours; otherwise, they need to retake the course. Teaching methods consist of traditional lectures (mostly in person), small group collaborations, individual assessments, seminars, and a summer school. The student's performance is assessed at the end of each semester through written or oral exams and assignments, based on the individual course structure. Grades are given on a scale from 0 to 10, with 5 being the passing grade. To obtain a master's degree, students must successfully complete all required courses and submit a postgraduate thesis, totaling 90 ECTS credits. The final exam includes multiple-choice and open-ended questions. However, the thesis period seems insufficient, as most students require at least one additional semester to complete it.

A significant part of the program includes educational visits to companies, research centers, and healthcare facilities like hospitals, which help students familiarize themselves with different professional environments. Still, students have expressed a desire for more visits and additional practical training. Furthermore, both students and stakeholders favor incorporating a 1-2 month internship with established collaborations, which would require funding.

The role of the Academic Advisor is central to fostering mutual respect between instructors and students. Advisors offer guidance on postgraduate studies and career prospects, monitoring students throughout their studies to help them achieve their academic goals. Students have reported positive experiences with their advisors and instructors, who have been helpful in providing advice and support. The department has an effective system for managing and resolving complaints at all levels. Students are encouraged to first address academic issues with their advisor and administrative issues with the PSP Secretariat. If the issues remain unresolved, students can submit a formal complaint or appeal using a specific form available on the PSP website or at the Secretariat. However, the complaint form is not easily accessible on the website (or may not exist).

The internal evaluation system involves feedback from students, instructors, and program organizers. Course evaluations are conducted after each course's completion and the evaluation includes 11 questions covering course content, instructor performance, educational material, and whether educational goals were met. Students rate these aspects from "strongly agree" to "strongly disagree" and from "very good" to "very poor," with an opportunity to provide additional comments. Nearly 50% of students participated in the evaluation, and most responses were highly positive. Negative evaluations were not mentioned, and it is unclear whether thesis evaluations are included in the survey.

Interviews revealed that the program maintains some involvement with graduates in academic activities, which helps with networking opportunities for prospective students. However, students feel that academic and professional opportunities in Greece are somewhat limited, leading many to look for opportunities abroad, especially for PhD studies or professional work. This contrasts with the perspective of stakeholders in companies, who seem eager to find potential candidates locally.

## II. Analysis

This PSP at UNIWA is a comprehensive program that spans three semesters, requiring 90 ECTS credits, with a combination of compulsory courses, electives, lab work, and practical training. Aimed at international students, the program is taught in English and but does not include opportunities for specialization through elective trajectories. Although the program offers valuable educational visits and exposure to the professional world, students have indicated a desire for more practical training and internship experiences. Assessment is done through exams, assignments, and a thesis, though the thesis period seems insufficient, with many students needing more time. Academic Advisors provide key support throughout the program, and the complaint management system is effective, but the complaint submission process could be easier to access. Course evaluations are mostly positive, but thesis evaluations are not clearly included. While the program encourages graduate networking, many students are inclined to look for opportunities abroad due to limited career options in Greece, which contrasts with the views of stakeholders who are keen to hire locally.

## III. Conclusions

This PSP at UNIWA offers a solid curriculum but could benefit from more practical training and internship opportunities to better prepare students for their careers. While the academic support system is positive, the short thesis period could be improved. Students appreciate the networking opportunities, but many seek careers abroad due to limited local options. Enhancing these aspects could make the program even more effective in meeting students' needs and expectations.

### Panel Judgement

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

### Panel Recommendations

The Panel recommends grouping elective courses into specific trajectories to allow students to specialize in a particular field, as many students might not be familiar with Biomedical Engineering and Technology.

Thesis period could be potentially extended by incorporating one more semester, without imposing potential financial strain to students. This could be achieved by including a blending learning approach of both synchronous and asynchronous education where students could attend one semester of a two-year program through e-learning, while benefiting for a longer research period and/or internship and practical training. Preparation of thesis could also start earlier than the 3rd semester, potentially after a rotation period to ensure students choose a suitable topic, according to their interests.



Foster stronger and more focused collaboration with stakeholders by establishing an advisory board and involving them in activities such as guest lectures, summer schools, or conferences for networking with students.

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

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

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

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

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

### **Documentation**

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

## **Study Programme Compliance**

### **I. Findings**

The study regulations document of the PSP does not contain any specific sections concerning the student admission procedures and the required supporting documents. However, all of these procedures were clearly highlighted during the presentation around the principle 4 that was given by Prof Glotsos. In an additional documentation shared by the coordinator of the MSc, the procedure dedicated to the application submission process, including that of the required supporting documents, is presented in a slide show format. However, in the presentation dedicated to the principle 4 it is mentioned that the details concerning the student selection procedures are highlighted in the internal rules of the MSc procedures and therefore it is possible that such a document exists. From the presentation given existing procedures cover all aspects related to the selection of the candidates, the provision of documents used for assessing their previous level of studies, the procedure for their submission, deadlines including those for oral interviews of the candidates. A call on applications for admission with a limited number of details concerning the admission requirements can be also found on the website of the MSc.

Furthermore, the admitted students are provided with an email address, as well as access to the electronic services of the University, including the electronic teaching platforms (eclass and moodle). A document describing in detail the procedures and regulations governing the e-learning possibilities is provided.

Concerning the student monitoring and procedures, the review panel did not find any written details in the provided documents. However, in the presentation all details were presented. The study program presents the number of ECTS associated with every teaching module along with the different options concerning the nature of each course (elective or required), but most importantly the learning outcomes and objectives that allow the student to appropriately select their courses to follow. In terms of student monitoring progress at the end of each academic year a detailed report is provided and analysed by a committee on the number of selected courses by the students and their performance.

The study program documentation provides a detailed section on the thesis (procedures, deadlines, parameters considered in the examination of the submitted thesis document, different alternative possibilities including the use of Erasmus funding and collaborating institutions, etc). A separate document is also available for the Erasmus funding opportunities. A degree certificate template has been also provided.

A separate document concerning the global University ethical rules for researches, the code of contact and good practices was also provided.

## **II. Analysis**

The study regulations document is a comprehensive manuscript that clearly describes most of the details required to satisfy this principle 4. Most missing details from the study regulations document are found in separate documents/presentations. It is essential to refer to these and integrate some of them in this main study regulations document (procedures for student admissions, continuous progress monitoring, e-learning capabilities and procedures).

## **III. Conclusions**

Most of the requirements to satisfy principle 4 exist in available documentation. An additional effort to render all this available in a single document may be appropriate.

### **Panel Judgement**

<b>Principle 4: Student admission, progression, recognition of postgraduate studies and certification</b>	
Fully compliant	
Substantially compliant	<b>X</b>
Partially compliant	
Non-compliant	

**Panel Recommendations**

Integrate in the study regulations document small sections referring to the procedures and regulations not currently included in in a main document.

More details are needed on the procedures for continuous monitoring of students' progress

Integrate in the thesis section of the study regulations the exact procedure of how the students are exposed/presented the different available subjects at the beginning of the process.

## **PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES**

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

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

*More specifically, the academic unit should set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff for the PSP and offer them conditions of employment that recognise the importance of teaching and research; offer opportunities and promote the professional development of the teaching staff; encourage scholarly activity to strengthen the link between education and research; encourage innovation in teaching methods and the use of new technologies; promote the increase of the volume and quality of the research output within the academic unit; follow quality assurance processes for all staff (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.*

### **Documentation**

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

## **Study Programme Compliance**

### **I. Findings**

The teaching staff of the DPMS includes 29 faculty members (17 ΔΕΠ), and 12 collaborating faculty and researchers (all PhD holders) including 5 researchers from institutions outside Greece. There are 8 universities from 7 countries including Greece represented including the National and Kapodistrian University of Athens, Greece, Georgia Institute of Technology, USA, University of Plymouth, UK, Polytechnic of Porto, Portugal, University of Applied Sciences Trier, Germany, Rey Juan Carlos University, Spain, and Politehnica University of Bucharest, Romania. Overall, the teaching staff are highly qualified and suitably specialized to carry out specialized teaching and research in the subject matter of the program.

The process for selecting teaching staff is guided by academic competence and aims to ensure the prestige of the Postgraduate Program and continuously improve the educational and research work of the Postgraduate Program. There is a coordinating Committee of the Postgraduate Program, which is responsible for identifying the needs for teaching staff and proposes solutions to the Department Assembly, which is the governing body for final decisions for involving teaching personnel. All faculty are experienced in their respective fields; however, there is no evidence that there is formal continued education and training that is provided to faculty to improve their teaching.

There is a listing of all faculty and staff and relevant information concerning teaching staff accomplishments (publications, h-index, etc.) for all teaching faculty. Although all faculty have published a reasonable number of peer-reviewed publications, some of the faculty have a relatively low number of publications based on their rank, although their academic/teaching credentials are very good to excellent. There is no information on available extramural funding for the faculty involved in the program. Employment regulations and obligations of the PSP staff are also provided and described in the corresponding official documents. A policy for the faculty's support and development is also in place. There is no information provided for teaching awards and other recognition for the teaching faculty that can provide additional motivation and recognition to faculty. Teaching awards will help boost the morale of teachers and help motivate them to excel in the future.

The Postgraduate Program seeks students' opinions on every aspect of the educational process through anonymous electronic evaluations of instructors and courses by students. The Coordinating Committee of the Postgraduate Program monitors the evaluation procedure and works to enhance student participation. As the program matures with more students, it will be important to ensure that most students participate in the evaluation process. All evaluation results are reviewed by the Director and the Coordinating Committee of the Postgraduate Program and corrective actions will be taken based on these evaluations and review of the entire course content.

Overall, the staff's research productivity and teaching quality are adequate and comparable with those of similar departments in Greece. The teaching load is acceptable. The teaching staff need to consider increased mobility offered by the Erasmus+ programme to enrich their research and teaching credentials. It is recommended that faculty meet as a group at least once per year to discuss the overall program and its direction. This meeting could be attended by expert teachers that can provide new methodologies for didactic lectures including incorporation of team exercises and involvement of students in presenting papers in journal clubs that are part of each course.

## **II. Analysis**

Overall, this graduate program, although new, is successful in accomplishing the stated goals of the program. The faculty involved in the program are experienced and involve mostly faculty from the home department of the institution.

Increasing the number of certain faculty from external entities including Greek-speaking faculty and scientists could further enrich the program. This action will increase visibility and attract foreign and Greek students with the goal to have at least 20 students enrolled in the program to render the program viable in the long run. Providing formal training in new teaching techniques for all faculty as well as teaching awards for teaching excellence will improve moral and visibility of the program. Engaging additional foreign scientists and particularly Greek scientists from abroad will further increase the importance and visibility of the program.

### III. **Conclusions**

This is a very attractive and new graduate program that has previous successful history as part of the home department. There is significant interaction with external institutions and research centres that can be further enhanced. A considerable strength of the program is that is taught in English. The program can be further enhanced by increasing participation of external stakeholders in advisory and evaluating capacities to the program.

#### **Panel Judgement**

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

#### **Panel Recommendations**

The panel recommends the more active involvement of current and graduate students and external stakeholders in advising the director and the curriculum committee of the need for certain courses and practical exercise. This can be accomplished by an advisory committee composed of past graduates, other stakeholders, faculty, and current students that can provide consultation about the entire program and propose potential changes.

It is recommended that there is formal mechanism for validating and enhancing teaching credentials through participation in teaching methodology seminars and providing opportunities for faculty to participate as guests in other programs that have teaching enhancement activities. In this regard, the panel recommends increased mobility of the faculty throughout Erasmus+ and other similar platforms. The panel recommends teaching awards for teaching excellence and other recognition in formal setting for faculty that excel in teaching and mentoring activities.

## PRINICPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMME. THEY SHOULD –ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT, AND – ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

*Institutions and their academic units must have sufficient resources and means, on a planned and long-term basis, to support learning and academic activity in general, so as to offer PSP students the best possible level of studies. The above means include facilities such as the necessary general and more specialised libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, IT and communication services, support and counselling services.*

*When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed students, students with disabilities), in addition to the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance proves -on the one hand- the quantity and quality of the available facilities and services, and -on the other hand- that students are aware of all available services.*

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

### **Documentation**

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

### **Study Programme Compliance**

#### **I. Findings**

To meet the teaching and learning needs of its students, the master's Program in "Biomedical Engineering and Technology" at the Biomedical Engineering Department offers a variety of infrastructure and support services, ensuring students have easy access to these resources. The internal quality assurance process regularly monitors both the quantity and quality of available infrastructure and services, ensuring that students are fully informed about what is provided. If any deficiencies are identified, corrective actions are taken.



Students are primarily informed about the available services through the University's and program's websites, the student guide, and during the orientation event for new students.

The program is supported by permanent faculty members from UNIWA, along with external collaborators from partner universities abroad, including institutes in Portugal, Romania, Germany, USA and the UK. This team consists of 16 faculty members who are responsible for teaching and supporting educational activities, and one administrative staff member handling administrative tasks. All staff members, whether permanent or external, are governed by the Personnel Support and Development Policy. Currently, the program enrolls a limited number of students (fewer than 10 per academic cycle), and the existing staff is able to support all students. However, provisions must be made to ensure that both administrative and academic support will be sufficient should student enrolment increase in the future.

The program utilizes the facilities of the hosting department at the UniWA campus for in-person teaching and daily operations. These facilities include a lecture hall and two officially established Research Laboratories that contribute to both the educational and research activities, a library, and nearby dining services. While the program does not offer remote learning, software such as MS Teams for live online classes and Open e-Class for asynchronous instruction are available through the university. The decision to prioritize on-site training is based on the belief that it offers a better educational experience. However, since the program mainly aims to attract international students, a partly remote education system could help reduce the economic burden on these students.

Students enrolled in the program have access to a range of services provided by both the program and UniWA, including free meals (based on eligibility), access to free healthcare, psychological and counselling services, library resources, a computer room, educational materials, and opportunities to participate in sports and cultural activities. Additionally, an accessibility unit is available to ensure equal access to academic studies for students with disabilities.

UniWA offers electronic services to enhance the academic experience of its students. These include a unified account granting access to various applications such as the Student Information System, Open e-Class, Microsoft Office 365, VPN, and Filesender, along with tools for file management, editing, and secure access. The program's resources primarily come from tuition fees, which amount to 1200 euros per student per academic cycle with provisions to increase the fees up to 1800 euros. While there is no detailed breakdown of the tuition fees, according to discussions with the program director, the fees are allocated as follows: one-third goes to ELKE, for administrative staff and other educational purposes, respectively. There is no current provision for scholarships due to the relatively low tuition fees.

## **II. Analysis**

This PSP at UniWA offers a well-supported educational experience, leveraging its on-campus infrastructure, including lecture halls, research labs, and student services such as free meals and healthcare. It operates with a dedicated team of faculty and administrative staff, supplemented by international collaborators, to

provide high-quality in-person instruction and research opportunities, though remote learning is not offered, except for occasional use of MS Teams and Open e-Class. The program's primary funding comes from tuition fees, which are modest and primarily allocated to administrative and educational needs, without provisions for scholarships. The university also ensures equal access for all students, including those with disabilities, through a variety of electronic resources and services. While the program currently enrolls a limited number of students, future expansion would require ensuring sufficient academic and administrative support.

### III. **Conclusions**

In conclusion, this PSP at UniWA provides a robust academic environment with dedicated faculty, ample student services, and good infrastructure, all aimed at ensuring a quality educational experience.

#### **Panel Judgement**

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

#### **Panel Recommendations**

Attract funding by participating in national and international research programs, or consider partly increasing tuition fees, particularly for international students, as many countries have adopted this approach, and distribute according to needs (internships and/or scholarships and other education and promotional activities to attract students locally and internationally)

## PRINCIPLE 7: INFORMATION MANAGEMENT

**INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF POSTGRADUATE STUDY PROGRAMMES AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY ACCESSIBLE WAY.**

*Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students.*

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

*The information collected depends, to some extent, on the type and mission of the Institution. The following are of interest:*

- *key performance indicators*
- *student population profile*
- *student progression, success, and drop-out rates*
- *student satisfaction with their programmes*
- *availability of learning resources and student support*

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

### **Documentation**

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

### **Study Programme Compliance**

#### **I. Findings**

The Department maintains a centralized information system to manage the Quality Assurance process. Course evaluation surveys are conducted and there is a process for analysing and acting upon the evaluation results. Evaluation of courses is carried out at the end of each semester for all courses and teaching faculty. The participating Departments and faculty have continuous feedback interactions with its graduates, including research and educational activities.

The University of West Attica provides an adequate range of network services to the academic community, supporting the educational process, research activities, as well as administrative and support services of the institution provided by a

dedicated network support unit. There is an Electronic Student Record system providing each lecturer with access to their courses for review and grading management, and the students enroll in courses and track their grades through this system. The Postgraduate Program uses the MODIP data recording system, including collecting information from instructors, which is used to create statistical reports and academic publications. Importantly, data from all courses each semester are made available to course coordinators and instructors for self-improvement. Results from student evaluations of courses and instructors are considered in the career evaluations of academic staff, ensuring compliance with personal data protection regulations.

## **II. Analysis**

A sufficient range of information is provided for the needs of the National Information System for Quality Assurance in Higher Education (NISQA) based on the data available. The Department and the Program maintains sufficient processes for the analysis and evaluation of data related to the availability and accessibility of resources (equipment, social services, IT facilities, etc.), as these are defined at Institutional level. The program website is of high quality and can be further improved by providing additional information about the individual courses and the vision and mission of the graduate program.

## **III. Conclusions**

The review panel finds that, overall, the programme fully complies with Principle 7. The Department collects and analyses all data related to Quality Assurance and performs analyses of the collected course evaluation data at the instructors' level.

### **Panel Judgement**

<b>Principle 7: Information management</b>	
Fully compliant	<b>X</b>
Substantially compliant	
Partially compliant	
Non-compliant	

### **Panel Recommendations**

The student course/instructor evaluations need further attention in the future as the number of students increases. Students must become aware of the importance of the evaluation process so that they can appreciate its significance for improving the programme delivery, thus motivating increased survey participation.

The career paths of graduates are not monitored systematically. A dedicated alumni portal may be developed to promote post-graduation interactions that can facilitate important networking interactions among graduates and further collaborations with the Department and the programme. Formation of a formal External Advisory Board will help achieve this goal.

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

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

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

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

### **Documentation**

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

## **Study Programme Compliance**

### **I. Findings**

The institution website is well structured and includes a dedicated page for the MSc programs in each of its main departments (<https://www.uniwa.gr/spoydes/metaptychiakes/>). Both English and Greek language versions are available. The MSc website seems to serve as a communication and management tool. All the contents of the website are continuously updated and are available in English, as the official language of the program, and to a large extent also in Greek.

### **II. Analysis**

A webmaster is nominated by the steering committee of the Master and he/she is responsible for the regularly updating its contents. A scheme for updating the website content seems to be in place. The structure of the website is updated and upgraded according to the needs of members and international trends. This includes both continuous and periodic updates. Ongoing updates relate to current information about student and teaching issues events conferences seminars research activities of the teaching staff of the MSc. Periodic updates concern topics that remain relevant for a significant period, such as: laws regulations organisation useful information related to the MSc.

### **III. Conclusions**

In conclusion, the contents of the website but also their maintenance and update are conform with the aspects mentioned in this principle.

## **Panel Judgement**

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

**Panel Recommendations**

In conclusion, the contents of the website but also their maintenance and update are conform with all aspects mentioned in this principle.

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

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

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

*The above comprise the evaluation of:*

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

*Postgraduate study programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date.*

### **Documentation**

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

### **Study Programme Compliance**

#### **I. Findings**

The academic institution and the unit offering the MSc program in Biomedical Engineering and Technology obtains an internal quality assurance system in the framework of which it implements checks and balances and implements internal assessment of the programme. In result, achievement of programme objectives is made possible through ongoing feedback control and continuous readjustments, leading to continuous improvement of the student experience and programme delivery.

#### **II. Analysis**

The internal program evaluation is a periodically repetitive process in which instructional faculty as well as program students are actively participating. Particularly students fill out questionnaire forms, get interviewed and take part in group meetings and deliberations. Statistical data analysis follows that allows instructors to:

- Identify potential shortcomings in their teaching and course/content delivery
- Research ways to overcome shortcomings
- Introduce improvements and more efficient teaching approaches
- Enrich course delivery with techniques that enhance student participation
- Improve the communication and understanding between students and instructors

The annual cycle of evaluation and assessment is completed with a Self-Study Assessment Report by the supporting Academic Unit. The coordinating committee of the MSc program in Biomedical Engineering and Technology reflects on the self-study outcomes and presents the academic unit's faculty assembly with recommendations and suggestions for corrective action. A committee is also conducting a self-study report detailing the results of the student course evaluations as well as the research activity of the program faculty and instructors.

### III. Conclusions

The MSc program in Biomedical Engineering and Technology implements a consistent and transparent plan pertaining to PRINCIPLE 9: ON-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES. An abundance of statistical data and associated analysis is available through the Self-Study report prepared by the special assignment committee of the supporting academic unit. The data volume enables not only thorough assessment of established practices and procedures but also promotes deliberations and reflections leading to further improvements for the program and the student experience and its content/course delivery.

#### Panel Judgement

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

#### Panel Recommendations

No concerns, weaknesses or deficiencies were identified in the Program pertaining to PRINCIPLE 9: ON-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES. One suggestion the Panel has to offer is to work out a more detailed plan for introduction of new topics, subjects and courses as well as content to keep the program up to date with trends in technology like e.g. in medical and surgical robotics.



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

THE POSTGRADUATE STUDY PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY PANELS OF EXTERNAL EXPERTS SET BY HAHE, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

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

### Documentation

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

### Study Programme Compliance

#### I. Findings

The MSc program in Biomedical Engineering and Technology offered by the University of West Attica is required to regularly undergo evaluation by panels of external experts set by the Hellenic Authority for Higher Education (HAHE), aiming at accreditation. The term during which the accreditation remains current and valid is decided by HAHE.

#### II. Analysis

Periodic external evaluation of the program is implemented by HAHE. Particularly, HAHE assigns external expert panels to assess whether accreditation should be awarded or not. The findings of the panel are employed to improve and enhance the program as well as the supporting academic unit and institution. The process consists of the following steps/phases:

- 1) Compliance commitment to the panel recommendations: The program and the supporting academic unit confers with the panel and notes down required actions and measures aiming to improvement
- 2) Reflection on panel findings and recommendations: The supporting academic unit records the full set of the panel recommendations. It then works with the Quality Assurance Unit (also known as MODIP by its Greek acronym) to finalize which part of the recommendations can or should be adopted for implementation.
- 3) Formulation of action plan: The academic unit then proceeds to develop an action plan to comply with and implement the recommendations of the external assessment panel. The action plan defines the actions and measures to be implemented, the required resources, as well as the timeline of implementation. After the academic unit complete their plan, they submit it to the institutional Quality Assurance Unit for approval and implementation.
- 4) Monitoring of action plan implementation: At the end of every academic year, the academic unit reassesses the actions implemented so far, and the progress attained by implementing the aforementioned action plan. A table in form of a checklist is conducted in the process showing:

- a. Outcomes attained so far
  - b. Degree of achievement of outcomes above
  - c. Actions implemented to comply with the external panel recommendations
- 5) Annual Progress report: The next stage is to conduct a progress report for the Program. At the end of every academic year after the program's accreditation a Progress Report is prepared and sent for review and approval by the institutional authorities and Quality Assurance Unit. The report is an essential part of the quality assurance plan of the entire institution and its related policies. It also enables a reflection of the external evaluation outcomes and the degree to which they are utilized.

### III. Conclusions

A consistent follow-up process is in place allowing the MSc program in Biomedical Engineering and Technology offered by the University of West Attica to ensure that it is periodically evaluated and assessed.

#### Panel Judgement

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

#### Panel Recommendations

Set-up and maintain an Industrial Advisory Board or Panel particular to the MSc program in Biomedical Engineering and Technology offered by the University of West Attica.

## **PART C: CONCLUSIONS**

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

- All relevant documents are well-written and document very well all QA procedures according to the HAHE guidelines. They adhere to the Institution's general policies and to the relevant regulatory framework. Most of them are both in Greek and English language.
- The PSP correctly identifies the main risk, which has to do with the rather low demand for its offering.
- The PSP academic and support staff are well-qualified and seem passionate in their duties, which they perform without any special or additional retribution. The same is true about the small PSP student body.
- Good relations with industry and other external stakeholders
- The internal evaluation system involves feedback from students, instructors, and program organizers. Course evaluations are conducted after each course's completion
- The process for selecting teaching staff is guided by academic competence and aims to ensure the prestige and continuous improvement of the educational and research work of the PSP
- High quality contents, structure, and maintenance of the PSP's website
- Consistent and transparent plan pertaining to continuous monitoring and periodic internal evaluation of the PSP

## **II. Areas of Weakness**

- The rather limited PSP size, in terms of enrolled students, poses a great risk for its sustainability. However, this is a new program and has potential to grow in the future.
- This PSP offers a solid curriculum but could benefit from more practical training and internship opportunities to better prepare students for their careers.
- More details are needed on the procedures for continuous monitoring of students' progress
- The teaching staff needs to consider increased mobility to enrich their research and teaching credentials.
- Lack of a continuous student progress monitoring system

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

P1.1 Better define the PSP audience target space. Elaborate on the potential benefits of the PSP offering and its specific advantages.

P1.2 Take measures to accommodate some inevitable gaps in prerequisite knowledge, possibly through the obligation to follow existing graduate courses according to the background of each incoming student.

P2.1. Elaborate on the PSP title, identity, goals, and strategy, possibly through a dedicated workshop.

P3.1 Group elective courses into specific trajectories, allowing specialization in a particular field.

P3.2 Thesis period could be potentially extended by incorporating an additional semester, without imposing additional financial strain to students.

P3.3 Foster stronger and more focused collaboration with stakeholders by establishing an advisory board (industrial partners, guest lecturers, previous students) and involving them in activities such as guest lectures, summer schools, or conferences for networking with students.

P4.1 Integrate in the thesis section of the study regulations the exact procedure of how the students are exposed/presented the different available subjects at the beginning of the process.

P5.1 Put in place a formal mechanism for validating and enhancing teaching credentials of lecturers of the PSP through participation in teaching methodology seminars. Increase mobility of the faculty throughout Erasmus+ and other similar platforms.

P6.1 Attract funding by participating in national and international research programs, or consider slightly increasing tuition fees, particularly for international students

P7.1 Monitor systematically career paths of graduates

#### IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are:

5, 6, 7, 8, 9 and 10

The Principles where substantial compliance has been achieved are:

1, 2, 3, 4

The Principles where partial compliance has been achieved are:

None

The Principles where failure of compliance was identified are:

None

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