ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC

Εθνική Αρχή
Ανώτατης Εκπαίδευσης
Hellenic Authority
for Higher Education

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

Accreditation Report
for the Postgraduate Study Programme of:

Applied Mathematics

Department: Civil Engineering

Institution: Democritus University of Thrace

Date: August 2025

Με τη συγχρηματοδότηση της Ευρωπαϊκής Ένωσης
ΕΣΠΑ 2021-2027
Πρόγραμμα
Ανθρώπινο Δυναμικό και Κοινωνική Συνοχή
enqa.

Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of **Applied Mathematics** of the **Democritus University of Thrace** for the purposes of granting accreditation

TABLE OF CONTENTS

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 Applied Mathematics of the **Democritus University of Thrace** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. MICHAILIDIS GEORGE (Chair)
   College of Literature, Science, and the Arts, University of Michigan

2. ANGELIS JANNIS
   KTH Royal Institute of Technology

3. Karanafti Aikaterina
   Aristotle University of Thessaloniki

4. PIMENIDIS ELIAS
   University of the West of England (UWE)

5. SPYRATOS NICOLAS
   Université Paris-Saclay & CNRS

II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) was established in mid-June 2025 and received the accreditation support materials for the Postgraduate Study Programme (PSP) on Applied Mathematics a few days before the accreditation visit. The review was organized by HAHE in collaboration with the Department of Civil Engineering at the Democritus University of Thrace. The support materials were of high quality, with documents carefully prepared and well-structured.

During the visit, all participants–including members of MODIP and OMEA, teaching faculty, current students, PSP graduates and external stakeholders–were prompt and forthcoming in providing the required information. The meetings were held on July 1st and 2ns, 2025, conducted online via the Teams video conferencing platform. The discussions took place in a constructive and collegial atmosphere.

The timetable and agenda of the accreditation review were as follows:

On Monday, July 1st, the EEAP members convened briefly to coordinate the accreditation review process and allocate specific tasks among the panel members. This was followed by a meeting with representatives from the Department and PSP administration, members of MODIP and OMEA, as well as members of the PSP Steering Committee. During this session, the Director of the PSP Professor Iliadis provided a comprehensive overview of the programme, covering its history, academic profile, student admission process, curriculum structure, teaching staff, evaluation mechanisms, and the programme's alignment with quality standards, internal procedures, and evaluation processes. The Department also shared a video featuring an online tour of classrooms, lecture halls, libraries, laboratories, and other facilities. The session concluded with EEAP members posing questions and seeking clarifications on various aspects of the programme presented.

Subsequently, a meeting was held with members of the PSP teaching staff, with a primary focus on infrastructure-related questions. The discussion also extended to issues concerning the examination period and the local accommodation of students during that time. The day's activities concluded with a private debriefing among EEAP members to reflect on and discuss their impressions from the first day.

On Tuesday, July 2nd, he EEAP members met with PSP teaching staff to discuss professional development opportunities, mobility, the competence and adequacy of the teaching staff in ensuring learning outcomes, workload, student evaluations, the link between teaching and research, and the teaching staff's involvement in applied research, projects, and research activities directly related to the programme. Subsequently, the panel met with current students enrolled in the programme to engage in discussions on student satisfaction with their study experience and Department/Institution facilities, student involvement in quality assurance, and priority issues concerning student life and welfare. After a brief break, the EEAP members met with PSP graduates to discuss their postgraduate study experience and career paths.
This was followed by a meeting with employers and social partners, who described various types of collaboration with the Department and the PSP.

Following these sessions, the EEAP members held a separate videoconference to discuss their initial impressions and prepare a brief oral presentation of their findings. The final meeting of the day was with the Director of the PSP and Head of the Department, and members of MODIP, the PSP's Steering Committee and OMEA, during which additional comments and clarifications were addressed. The EEAP provided a preliminary verbal report on their impressions and key findings.

The Panel wishes to thank the Department and the PSP for organizing and hosting these meetings, and for their cooperation and readiness to address questions and clarify issues throughout the virtual accreditation visit.

III. Postgraduate Study Programme Profile

The PSP in Applied Mathematics was initially established in 2015 (ΦΕΚ: 1315/1-7-2015 τ.Βʾ) and reapproved in 2018. (ΦΕΚ: 2554/2-6-2018 τ.Βʾ). Its Internal Regulations were updated to comply with Law 4957/2022 (ΦΕΚ: Β' 7009/31-12-2022). The provision for up to 100% distance learning introduced by Law 4957/2022 provided new momentum for postgraduate studies, especially in regional universities and benefitted this specific programme.

The PSP focuses on postgraduate education, research, and the practical applications of applied mathematics in science and technology. It is an integral part of the strategic plan of Democritus University of Thrace, aiming to advance knowledge, promote research, meet national educational and development needs, provide high-level training for graduates, and support scientific, technological, and productivity growth.

The PSP is a three-semester, 90 ECTS programme. The first two semesters are dedicated to coursework, while the third semester is reserved for the Master's thesis. The maximum duration of studies is six semesters, and students have the option to attend the programme on a part-time basis. The medium of instruction is Greek. Courses are delivered synchronously online, while examinations are conducted in person. The programme offers 14 courses in total, including 4 compulsory courses (2 per semester) and 10 electives. The Master's thesis, worth 30 ECTS, can be written in either Greek or English. As most students are employed, courses are scheduled mainly on Fridays, Saturdays, and Sundays, primarily in the afternoons, outside regular working hours, ensuring high participation.

Tuition fees for the PSP are €1,500, paid in three equal installments. Up to 30% of enrolled students may receive a tuition exemption based on financial criteria and academic excellence (graduation grade above 7.5/10), in line with current legislation (ΦΕΚ: 4899/16-09-2022). Occasionally, employers have covered students' tuition fees.

Since the introduction of online attendance, admissions to the PSP have increased—despite a temporary decline during the COVID period—and have stabilized at around 40 students over the past two academic years (2023–2025). While there is no formal cap on admissions according to the "Postgraduate and Doctoral Studies Regulations" of Democritus University of Thrace, the current intake of approximately 40 students aligns well with available infrastructure and staffing. Most applicants hold degrees in Natural Sciences, Engineering, or

Economics from Greek universities or equivalent institutions abroad.

The admission requirements and selection criteria for the PSP are clearly defined, encompassing both quantitative and qualitative measures , and are published in the Internal Regulations. Candidates are assessed based on various factors, including the relevance of their undergraduate degree, academic performance, foreign language proficiency, recommendation letters, research or professional experience, publications, and an interview.

In the academic year 2024–2025, the PSP was staffed by 12 faculty members from various Departments of Democritus University of Thrace: 5 from Civil Engineering, 3 from Electrical and Computer Engineering, and 3 from Environmental Engineering and Production & Management Engineering. Four of these faculty members are Emeritus or retired. The programme is supported by three administrative staff—two shared with the Department of Civil Engineering and one dedicated full-time to the programme, funded by the PSP.

The PSP has not undergone a prior evaluation by an external committee.

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 PSP operates within a well-established quality assurance framework, as confirmed by the documentation provided and discussions during the EAAP meetings with the programme administration and faculty. Essential mechanisms are in place to uphold both national and internationally recognized quality standards, ensuring high academic integrity across the programme, including the qualifications awarded. Recently, the PSP transitioned to a fully online mode of delivery, with all lectures conducted remotely, while examinations continue to take place in person. The implementation of in-person

examinations serves as a strong indicator of the programme's quality assurance. The continued use of in- person examinations serves as a strong indicator of the programme's commitment to quality assurance. Moreover, the dedication of the staff is reflected in the programme's design and ongoing curriculum modification processes.

The course offerings align closely with the expertise of the PSP's teaching staff, providing both depth and breadth across core and specialized topics in Applied Mathematics. There is clear integration of research and teaching, demonstrated through projects in elective courses and the Master's thesis. Notably, a small number of PSP graduates continue on to doctoral studies, further reflecting this strong research connection.

Graduation rates are very satisfactory, excluding distortions caused by the COVID-19 lockdowns. Furthermore, the strong enrollment observed over the past two academic years reflects the programme's continued attractiveness.

The quality of support services available to PSP students, including administrative services, library resources, and the student welfare office, is satisfactory and meets the programme's needs. These services are accessible to students and adequately support both their academic progress and overall student experience.

The tuition fees are appropriately allocated to cover faculty compensation, the salary of one administrative staff member, as well as expenses related to registration, travel for conferences, and other research-supporting activities for both PSP faculty and students.

II. Analysis

The teaching staff possess extensive experience in delivering this programme, which has now been offered for a decade. In recent years, the programme's structure has been updated to include courses in computer science, such as Python, AI, and computational intelligence. Following the COVID-19 pandemic, the programme transitioned to an online delivery mode, a change that has had an overall positive impact, as noted in the Findings section.

Despite the positive trend in enrollment, the programme appears to have lowselectivity. Data provided by the PSP show that over 75% of applicants (from just over 50 candidates) were admitted in the academic years 2022-23 and 2023-24), with a median score of 55 out of 110 and a minimum score below 50. The applicant pool is dominated by graduates of Mathematics departments (~60%), with the remainder from engineering, economics, and physical sciences. While this indicates the programme has carved a niche and strong appeal among mathematics graduates—as confirmed in discussions with students, alumni, and social partners—it has yet to attract a broader pool of applicants from other disciplines. The emergence of new Applied Mathematics programmes, particularly those focused on modern areas such as machine learning and AI, may further limit the PSP's appeal and jeopardize its long-term sustainability.

There is an informal mechanism in place for updating the PSP's curriculum, course

offerings, and existing courses, based on faculty discussions regarding trends in applied mathematics and emerging applications, feedback from student course and instructor evaluations, and informal exchanges between faculty and programme graduates.

III. Conclusions

This PSP corresponds to a well-established programme delivered by faculty members from various Departments of the Democritus University of Thrace, with strong expertise in the programme's subject areas. It has received consistently positive feedback from both current students and alumni. The programme adheres to established quality assurance policies, ensuring a high standard of academic delivery. The recent transition to fully online teaching has further improved its accessibility and flexibility.

However, the EEAP notes concerns regarding the programme's low selectivity and its relatively limited appeal beyond mathematics graduates. The EEAP recommends that the faculty and administration actively explore strategies to broaden its reach, with the establishment of an external advisory committee (see also conclusions and recommendations in Principles 6 and 9) as a potentially useful step in this direction.

Panel Judgement

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

Panel Recommendations

R1.1. - Establish a more formal and systematic process for updating the PSP's curriculum, that should include structured input from faculty, students, alumni and external stakeholders.

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 PRORAMME 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

The structure of the programme is clear and consists of 90 ECTS credits. It was designed with consideration for labour market needs in the relevant field and is reviewed annually each fall. The programme is offered full-time and is completed over three academic semesters. Students must successfully complete eight courses (four mandatory and four elective) followed by a research thesis. Each course carries 7.5 ECTS, and the thesis accounts for 30 ECTS. The learning outcomes, aligned with the National and European Qualifications Frameworks for Level 7, aim to equip students with the necessary knowledge and skills. All courses are evaluated by students based on several criteria, including the relevance and quality of course materials, the effectiveness of teaching methods, and faculty accessibility. The curriculum is regularly updated to reflect student and faculty input; for example, courses on Artificial Intelligence and Programming in Python were recently introduced to enhance students' skill sets. The programme document provides course outlines, and the student guide covers all practical information. Enrollment remains stable at around 40 students, the majority of whom have a mathematical background. Teaching is primarily provided by faculty from three departments—Civil Engineering, Electrical and Computer Engineering, and Environmental Engineering—with additional support from the Department of Production Management Engineering as needed.

II. Analysis

The PSP adheres to the required qualification frameworks, ensuring an advanced level of teaching. Students have access to clear information on courses, and the faculty actively seeks their input to improve the programme. Graduates secure employment in relevant fields, particularly in teaching and the public sector, where PSP-acquired skills are valued.

There is an ongoing effort to balance applied and theoretical mathematical content, and both current students, graduates, and social partners (all of whom are programme graduates) interviewed by the EEAP expressed satisfaction with the current course mix. Faculty incorporate their research into the curriculum, and the relatively small class sizes, especially for electives, allow for direct interaction between students and staff. Notably, electives are offered even with very low enrollment, enabling faculty to teach in their areas of expertise.

The EEAP observed that relationships between graduates and the programme tend to remain informal, focused on individual faculty rather than the PSP as a whole. The relationship with social partners is similarly ad hoc, maintained primarily through personal contacts with faculty members. Although the PSP does not include work placements, students—many of whom choose the programme for its distance learning format—did not express a need for such an element.

III. Conclusions

The PSP effectively delivers the intended knowledge in applied mathematics. The manageable student numbers foster close collaboration between faculty and students, and electives are offered even with small enrollments. Teaching standards and student engagement in programme improvements are met. However, establishing a more structured relationship with social partners would help ensure the programme remains relevant and valued.

Panel Judgement

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

Panel Recommendations

R2.1 - Establish a format in which social partners can have systematic input to the PSP, rather than through individual faculty members.

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

In recent years, the educational process has been conducted remotely using appropriate platforms such as MS Teams, while examinations are carried out in person. Student attendance at lectures is mandatory, and throughout the semesters, students are required to complete numerous projects, which

contribute to their better understanding of the course material. The PSP also includes many Muslim students from Thrace, giving it a multicultural character and fostering the exchange of ideas and knowledge among students.

The method of assessment for each course varies and is determined by the professor, who informs students whether there will be a written or oral exam or a semester project.

In previous years, evaluation questionnaires were distributed each semester, allowing students to assess each course and the teaching process. Currently, this is done solely through the online questionnaire of the Quality Assurance Unit (MODIP), with evaluations conducted on a semester basis.

The PSP also implements an academic advisor system, whereby students can reach out for guidance and information regarding their studies.

II. Analysis

Both current students and alumni of the program have expressed satisfaction with the quality of teaching. From discussions with both students and teaching staff, it became evident that dialogue during lectures is encouraged, often at the professors' initiative. Students were particularly satisfied with the assignments given during the first two semesters, as they help deepen their understanding of the subjects. It was noted that the workload increases significantly in the second semester; however, students did not express dissatisfaction, as the increased demands help them delve further into each subject.

Given that the PSP requires a strong background in mathematics, both professors and students acknowledged that those admitted from engineering schools or other departments receive considerable support and understanding from the teaching staff.

Student feedback indicated that group projects are limited, mainly due to the remote nature of instruction. Additionally, while all students reported being satisfied with their communication with the teaching staff, the role of the academic advisor appears to be somewhat limited in practice, as the teaching staff overall provides sufficient communication and support.

Furthermore, a considerable number of students expressed a desire for more research seminars and lectures on current technological developments. Finally, a particularly positive aspect is that the program administration and teaching staff

take student evaluations seriously; notably, there has been an instance where an instructor was removed from a course following a collective student request.

III. Conclusions

n summary, the PSP has achieved a student-centered learning approach and places strong emphasis on the regular evaluation of courses by both students and the Steering Committee. However, it would be beneficial to communicate evaluation results to students in a more formal and transparent manner. Given the remote nature of the programme, increasing the number of seminars on emerging technologies is both feasible and desirable to better inform and engage students. Finally, incorporating more group projects would further promote collaboration and teamwork among students.

Panel Judgement

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

Panel Recommendations

R3.1 - Organize more research-oriented lectures to inform students about cutting-edge technological developments, delivered by distinguished experts.
R3.2 - Assign more group projects to promote teamwork and collaboration among students.
R3.3 - Analyze and discuss the results of periodic evaluations in a more formal and structured manner.

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 PSP in Applied Mathematics primarily recruits students from Mathematics, Engineering, Science, and occasionally Economics or other fields that benefit from Mathematics and Computing applications. Applicants must meet admissions criteria and successfully complete an interview. The programme director presented the selection criteria and the corresponding ranking points, with a maximum possible score of 110. However, these criteria are not publicly available to applicants; only the compulsory interview is mentioned on the University's website in the application section.

According to data kindly provided by the programme, the median ranking points of admitted students in 2023-24 was 55, with the lowest at 47. Out of 54 applicants, 41 were admitted. In 2024-25, 52 applied and 42 were admitted. Having recovered from the disruptions caused by the COVID-19 pandemic, the programme's transition to mainly distance learning appears to have attracted more students.

The completion rate is high, suggesting a supportive learning environment and strong student achievement. Although not explicitly stated, the low difference between admissions and completions implies minimal withdrawal or failure rates.

The programme complies with all relevant university regulations regarding research ethics, postgraduate programme management, and student grievance handling. It also follows established procedures for evaluating teaching quality and incorporates student feedback to continually enhance the programme.

Graduates receive a Diploma Certificate confirming successful completion of postgraduate studies at level 7 with 90 ECTS credits, accompanied by an academic transcript detailing coursework and grades.

Due to most students being employed full-time, the programme does not offer student mobility or internships as standard options. However, students involved in research projects or dissertations often have opportunities to present at prestigious international conferences organized by faculty. Additionally, students interested in further challenges may participate in funded research or consultancy projects.

II. Analysis

The programme primarily attracts students with a background in mathematics, alongside a smaller number of computer scientists, some engineers, and a limited number of scientists and economists. While the programme enrolls an adequate number of students, there is a noticeable bias toward mathematics graduates. This persists despite the recent inclusion of cutting-edge topics heavily influenced by applied mathematics, such as computer science and machine learning, which could appeal to a broader range of scientists and engineers. The programme's firm—but somewhat limiting—title, "Applied Mathematics," may act as a barrier to attracting candidates from other fields, reducing its overall appeal and leaving it vulnerable to competition from similarly focused programmes with more inclusive or broader, more appealing titles.

The acceptance rate is very high, while the average ranking points of admitted candidates are relatively low. This may be influenced by a modest number of applications combined with low tuition fees, prompting the programme to admit a high proportion of applicants to maintain viability. Although there is currently no evidence this poses a problem, the combination of low application numbers and high acceptance rates poses risks for the future.

In recent years, the programme has gradually incorporated modules in computing and artificial intelligence to align with the demands of the Fourth Industrial Revolution. This presents an opportunity to further emphasize the core strengths of applied mathematics and its impact on emerging technologies such as machine learning, blockchain, and large language models (LLMs). By carefully curating a technologically oriented track with relevant modules, the programme could enhance its appeal to engineering graduates seeking careers in research or industrial applications of these disruptive technologies central to the Fourth and Fifth Industrial Revolutions.

III. Conclusions

The programme operates effectively, adhering to all essential university regulations governing postgraduate studies. Its quality is evidenced by high progression and completion rates.
However, the high acceptance rate amid a relatively small applicant pool suggests vulnerability to competition from programmes with related focus but broader scope. The current overreliance on mathematics graduates—who constitute the majority of students and applicants—is both a short-term strength and a potential medium- to long-term weakness.

Expanding the programme with more technically focused modules could broaden its appeal, attracting a wider range of graduates, including those from engineering disciplines.

Panel Judgement

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

Panel Recommendations

R4.1 - Consider expanding the curriculum to include more technology-related modules, potentially creating a specialized track that is mathematically grounded yet focuses on state-of-the-art solutions for engineering challenges.

PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES

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

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

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

Documentation

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

Study Programme Compliance

I. Findings

The PSP is an interdepartmental program delivered in collaboration with three Departments from the School of Engineering. Each of these Departments contributes academic staff, forming a teaching team of 11 out of the 12 faculty members involved in the programme. The remaining member is a recently retired professor from a department outside the three directly participating in the programme's delivery.

The range of topics covered across the 14 taught courses (core ones and electives) is well supported by the expertise of the teaching team.

The teaching team are all members of staff of the university and have been recruited according to the university's regulations which abide by the laws of the

country and the regulations of the ministry of education. Their teaching work is regularly monitored and evaluated according to the university's regulations and student feedback methods applied by the university's quality assurance organisation (MODIP).

Most members of the team are very research active, with some considered world-leading researchers in their fields. Thus, the overall research experience of the team is more than well qualified to support the PSP with new and relevant knowledge at the forefront of developments.

The majority of research-active staff participate in externally funded projects, which foster collaborations with established international researchers in their fields and produce high quality outputs. These outputs are regularly presented at highly rated international conferences and published in high impact factor international journals, often enriching teaching materials and inspiring innovative thesis topics.

The University supports staff development in a variety of ways that are common to all academics across the institution. It is not clear whether there are any funds from the PSP's budget assigned to staff development specific to the teaching and development for this programme.

II. Analysis

Considering that the programme is offered fully online (except for written examinations), it is not clear whether there is a continuous development system to allow staff to benefit from new theories, techniques, and approaches to teaching online. This could benefit not just the staff but the students who could be exposed to new modes of learning and possibly better enabled to learn and respond to new materials and new technologies presented across the different models.

The level of research engagement and corresponding achievements among the teaching staff, as reflected in metrics such as Google Scholar statistics, varies considerably. The programme benefits greatly from the presence of highly accomplished researchers, some of whom are internationally recognized leaders in their fields. Their contribution to the programme and its students is both evident and highly valuable. At the same time, there are members of staff whose research output appears more limited relative to expectations for their academic rank. This raises the question of whether the relevant departments should consider targeted support or development plans to help these staff members enhance their academic profile, or whether the programme should explore ways to broaden its pool of teaching staff to further strengthen the overall academic offering.

The staff members the panel met and engaged with demonstrated strong enthusiasm and commitment to the programme, which reflects well on both the programme itself and its steering committee. The panel notes that four of the twelve academics teaching on the programme are emeritus or recently retired professors. While their dedication and expertise are unquestioned, the panel encourages the programme team to plan for the inclusion of new faculty members who can bring fresh expertise and enable the introduction of new elective topics, thereby enriching the curriculum.

III. Conclusions

The programme's teaching team is appropriately qualified to deliver this PSP and brings a strong interdisciplinary dimension to the teaching, which serves as a source of inspiration for students.

Variability in research output among faculty could be addressed through more coordinated planning across the participating departments.

A gradual update of course topics, faculty skill sets, and staffing could further support the programme's continuous improvement.

Panel Judgement

Principle 5: Teaching staff of postgraduate study programmes	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

R5.1 – Develop a continuous improvement plan to support staff in enhancing their online teaching skills, strengthening research output where needed, and updating the curriculum with new topics and modules.

PRINCIPLE 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 LEARING 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 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 (ifapplicable)*

Study Programme Compliance

I. Findings

In recent years (following the pandemic), the PSP has been conducted entirely via distance learning, with the exception of the examinations, which are mainly held in person at the facilities of the Department of Civil Engineering of the Democritus University of Thrace (DUTH), unless a course requires a semester project instead of a final exam.

According to the Study Guide, the Department of Civil Engineering has three certified teleconference rooms, while classes are primarily conducted using the

MS Teams platform. Teaching materials are uploaded on the e-class platform, where they are accessible to students.

Upon enrollment, students are granted access to the central library of DUTH (both physical and digital), and consequently, to the libraries of all departments of the university. They also have access to international scientific databases. Additionally, there is an electronic administrative system (Universis) in place to ensure faster and more efficient student services. Furthermore, the university and the department offer a wide range of services to fully support students throughout all aspects of their academic journey.

Despite the distance-learning format of the program, students may take advantage of all benefits and privileges offered by DUTH to its students and, if they wish, they can use the facilities of the Department of Civil Engineering (such as the computer lab) during their studies.

Students are informed through various channels to ensure they are fully aware of the available services from the beginning of their studies.

The PSP's administrative staff consists of three people, one of whom is under a contract funded by the program's own revenue. According to the tuition utilisation plan and the 2025 balance sheet, the program has thus far generated sufficient income to cover its operational needs and maintains a significant financial surplus.

II. Analysis

During discussions with students, they expressed high satisfaction with how student-related matters are handled by the administration and appreciated the quality of communication and information provided by the teaching staff.

Students also emphasized the willingness of program coordinators and faculty to facilitate their examination process and help minimize expenses by scheduling all exams of each semester within a single weekend. At the same time, efforts are made to secure lower hotel prices in Xanthi and avoid scheduling exams during peak tourist seasons, such as the Carnival period.

To ensure the long-term sustainability of the MSc program, it is deemed necessary to consider the existence of similar programs at other Greek universities and the potential increase in such programs due to the establishment of private universities. Therefore, alternative sources of funding should be explored, such as sponsorships from the private sector, through a stronger connection between the PSP and the labor market.

III. Conclusions

The PSP makes effective use of the Department of Civil Engineering's facilities for both distance learning and in-person examinations, while both teaching and administrative staff contribute significantly to its smooth operation and the support of students. Strengthening the program's ties with the labor market and seeking alternative sources of income through such connections would help ensure its viability in the coming years, especially as the number of similar programs offered by public and private universities is expected to rise.

Panel Judgement

Principle 6: Learning resources and student support	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

R6.1 – Strengthen the programme's engagement with the labour market and actively seek alternative funding opportunities through these connections to further support the programme's long-term sustainability

PRINCIPLE 7: INFORMATION MANAGEMENT

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

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

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

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

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

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

Documentation

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

Study Programme Compliance

I. Findings

The PSP under consideration is hosted by the Department of Civil Engineering and has been in operation since 2015. The Department has established an information system to manage, monitor, and analyse data related to the student body, teaching methods, student progression, satisfaction, programme structure, resource availability, and student services. Key performance indicators include course and teaching evaluations, student performance, and faculty research activity. Student satisfaction surveys are conducted online, with results systematically analysed, communicated, and used to support programme improvements. The information system also ensures the protection of personal data.

II. Analysis

The Programme has established procedures for collecting, managing, monitoring, and analysing data, as well as communicating results to the relevant bodies—an essential component for identifying both strengths and areas for improvement. These procedures are clearly documented in the Programme's Quality Manual. However, the Department does not appear to systematically collect feedback from two key sources: Alumni and external stakeholders. Currently, such input is gathered informally, primarily through personal connections. Structured engagement with alumni and external stakeholders could significantly benefit the PSP, providing valuable feedback on labour market trends, offering career advice to students, and serving as an important recruitment pipeline for Ph.D. candidates. It is worth noting here that all external stakeholders met by the EEAP were also graduates of the Programme.

III. Conclusions

The EEAP considers the Programme's information management system satisfactory, with relevant data collected, managed, monitored, and analysed in accordance with clearly documented procedures. However, the collection of feedback from alumni and external stakeholders should be carried out in a more systematic and structured manner.

Panel Judgement

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

Panel Recommendations

R7.1 – Establish a dedicated alumni database specific to the Programme and integrate it into the existing information management system.
R7.2 – Formally establish an advisory committee and convene at least once a year to discuss matters related to the development of the Programme, including potential curriculum updates, employment opportunities, and broader strategic directions.

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 Department provides comprehensive information to prospective and current students, alumni, external stakeholders, and the general public. The primary communication channel is the Department's website, which features a dedicated section for the Programme.

The information provided includes details on the PSP's activities, quality assurance policy, course outlines and learning outcomes, teaching and assessment methods, the student guide, proposed diploma thesis topics, and graduates' employment prospects. The website is available in both Greek and English and is regularly updated. Additional promotional and information channels include workshops, invited lectures, and connections with alumni and social or industrial stakeholders, though the latter are currently engaged in an ad hoc manner (see also Principles 7 and 9).

II. Analysis

The Department's website provides clear and comprehensive information on its operations. However, the section dedicated to promoting the Programme requires improvement in two key areas:

(a) Navigation: Accessing the Programme's webpage is not straightforward. For example, a search for "Democritus University of Thrace, Master in applied mathematics" produces three results: two identical entries titled "Applied Mathematics" and one titled "Distance Learning MSc Applied Mathematics",

which misleadingly directs users to a similar programme at the University of the Aegean.

(b) Content completeness: Some sections within the Programme's webpage, such as “News and Announcements”, appear incomplete or outdated.

III. Conclusions

The EEAP considers that public information is communicated in a generally satisfactory manner. However, its presentation and accessibility through the Department’s website could be further improved.

The 2023 internal report also highlighted this issue.

Panel Judgement

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

Panel Recommendations

R8.1 - Revise the design and structure of the Department’s website to:
(a) Ensure that the PSP’s webpage is easily accessible;
(b) Complete any missing information related to the Programme’s operation (e.g., News and Announcements section);
(c) Include information on the Programme’s Advisory Committee (see also Principles 7, 9).

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 PSP has established clear mechanisms for ongoing monitoring and periodic internal evaluation. This process is supported by several committees, including the Programme's Coordinating Committee, the Internal Evaluation Team (OMEA), the Outreach and Promotion Committee, the Quality and Control Committee, the External Advisory Committee, and the Research Committee. Internal evaluation is conducted annually with the support of MODIP, and student teaching evaluations contribute to the assessment process.

II. Analysis

The PSP collects data through student evaluations, which assess the quality of courses, teaching, and instructors. These evaluations serve as a key tool for programme assessment and adjustments where needed.

The PSP is primarily assessed through student evaluation surveys. However, it does not fully meet Principle 9, as there is no structured feedback mechanism from external stakeholders and recent graduates, which would be valuable for ensuring the programme responds to external needs and supports its ongoing development. The EEAP also noted the absence of clear KPIs for the relevant committees to effectively monitor and guide programme improvements.

The composition of the PSP's External Advisory Committee and its role in providing feedback programme administration has not been specified.

III. Conclusions

The PSP is primarily assessed through student evaluation surveys. While this provides valuable feedback, the programme has room for improvement with respect to Principle 9, as outlined in the Analysis section above.

Panel Judgement

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

Panel Recommendations

R9.1 - The PSP should develop satisfaction surveys for external stakeholders and recent graduates.
R9.2 - KPIs for the committees responsible for the ongoing monitoring and evaluation of the PSP should be clearly outlined.
R9.3 - The External Advisory Committee should include past programme graduates and external stakeholders.

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 PSP is in its 10th year of operation. A quality assurance system is in place for the internal and external evaluation of the PSP. The Democritus University of Thrace, through its Quality Assurance Unit (MODIP), organise and supports external evaluation procedures of the PSP, according to the guidelines and directions provided by HAHE. The PSP has been continuously evaluated internally using MODIP, as well as through ongoing student course feedback and discussions with external stakeholders. This has led to ongoing programme improvements. The PSP faculty views evaluations as a catalyst for improvement.

II. Analysis

The three departments delivering the PSP actively participate in the evaluation process administered by the MODIP of the University The EEAP found the PSP faculty to be highly cooperative and informative during the interviews, demonstrating a clear understanding of the significance of the accreditation process and a positive attitude toward any recommendations provided by the panel. Based on the documentation reviewed and the feedback gathered from academic staff, students and social partners, the EEAP concludes that stakeholders are meaningfully involved in both the internal and external evaluation of the PSP. Moreover, internal evaluation findings by MODIP reflect a strong awareness of, and commitment to, enhancing data collection practices to

support continuous improvements in teaching, student performance, and the programme's societal relevance.

III. Conclusions

External quality assurance systems are in place to meet the requirements of Principle 10. During discussions with the EEAP, the faculty and PSP staff recognised the importance and necessity of the external evaluation of the program, in addition to the internal evaluations conducted by MODIP.

Panel Judgement

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

Panel Recommendations

None

PART C: CONCLUSIONS

I. Features of Good Practice

1. The programme has a ten-year history and has established a distinct identity in Applied Mathematics. It covers both classical areas (e.g., differential equations, applied functional analysis, linear algebra) and more computational fields such as computational intelligence, AI, and elements of data science. The relatively low tuition fees (€1500) also contribute to the programme's attractiveness.

2. The introduction of new topics in Applied Mathematics through elective courses helps keep the programme relevant and attractive.

3. The transition to online course delivery, combined with in-person examinations, has enhanced flexibility, increased enrollments, and maintained academic standards.

4. Feedback from current students and graduates is highly positive regarding (i) course offerings and their quality, (ii) Interaction with faculty, and (iii) breadth and depth of Masters thesis topics

This positive feedback serves as a strong indicator of the programme's overall effectiveness.

II. Areas of Weakness

1 Although enrollments increased significantly following the shift to online delivery, the EAAP observed that the overall number of applicants remains relatively low, resulting in a high admissions rate. Student feedback indicates they deliberately chose this programme over similar PSPs in Applied Mathematics offered by other universities, which is a positive sign. However, newly established or planned PSPs in Applied Mathematics at other universities, particularly those with a stronger emphasis on modern, application-driven areas such as machine learning, AI, and data science, may increase competition.

This competition could reduce applicant numbers, threaten enrollments, and ultimately limit the programme's ability to offer a broad range of electives, impacting its sustainability. The situation is further compounded by the fact that 4 out of the 12 teaching faculty are retired.

2. The EAAP did not identify a clear mechanism for how curriculum changes within the PSP are initiated and implemented. While organic updates through faculty discussions and monitoring of developments in relevant fields are

valuable, a more formal and structured process is recommended. In this context, establishing an External Advisory Board comprising social partners, academics or researchers in Applied Mathematics, and programme graduates would provide valuable input and support the continuous improvement and relevance of the curriculum.

III. Recommendations for Follow-up Actions

1. The EAAP urges the PSP to closely monitor the number of applications and competition from related programmes and take proactive measures to ensure the programme remains sustainable, competitive, and continues to grow.

2. The PSP should establish a formal, structured mechanism for curriculum review and revision. This should include the creation of an External Advisory Board.

3. Students expressed interest in attending both general-interest and specialized online seminars in Applied Mathematics. Given the online nature of the programme, such seminars would be easy to implement at minimal cost and would benefit both students and faculty.

4. The PSP should produce a continuous improvement plan to enable and support staff to continue to develop their online delivery skills, improve research outputs where required, and update the curriculum with new topics and modules.

5. Revise and improve the design and structure of the programme's website to enhance accessibility, completeness, and visibility.

6. Explore additional funding opportunities to support the programme's long-term sustainability, as noted in the comments under Principle 6.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 2, 3, 6, 7, 10**

The Principles where substantial compliance has been achieved are: **4, 5, 8, 9**

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

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

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

The members of the External Evaluation & Accreditation Panel

Name and Surname	Signature
MICHAILIDIS GEORGE	Signed by MICHAILIDIS GEORGE
ANGELIS JANNIS	Signed by ANGELIS JANNIS
Karanafti Aikaterina	Signed by Karanafti Aikaterina
PIMENIDIS ELIAS	Signed by PIMENIDIS ELIAS
SPYRATOS NICOLAS	Signed by SPYRATOS NICOLAS