



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. +30 211 1903 400 • E. secretariat@ethaee.gr • www.ethaee.gr

Accreditation Report for the Postgraduate Study Programme of:

Computational and Statistical Data Analytics, MCDA

Department: Mathematics

Institution: University of Patras

Date: 16/06/2026



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 **Computational and Statistical Data Analytics, MCDA** of the **University of Patras** for the purposes of granting accreditation

TABLE OF CONTENTS

Part A: Background and Context of the Review	4
I. The External Evaluation & Accreditation Panel	4
II. Review Procedure and Documentation	5
III. Postgraduate Study Programme Profile	6
Part B: Compliance with the Principles.....	7
PRINCIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT	7
PRINCIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES.....	10
PRINCIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT	15
PRINCIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND CERTIFICATION.	18
PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES	21
PRINCIPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT	24
PRINCIPLE 7: INFORMATION MANAGEMENT	27
PRINCIPLE 8: PUBLIC INFORMATION CONCERNING THE POSTGRADUATE STUDY PROGRAMMES	30
PRINCIPLE 9: ON-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES	32
PRINCIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES	34
Part C: Conclusions	35
I. Features of Good Practice	35
II. Areas of Weakness.....	36
III. Recommendations for Follow-up Actions.....	36
IV. Summary & Overall Assessment	36

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 Computational and Statistical Data Analytics, MCDA of the **University of Patras** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Law 4653/2020:

1. KYRITSIS DIMITRIOS (Chair)
(Title, Name, Surname)
École Polytechnique Fédérale de Lausanne (EPFL)
(Institution of origin)
2. ANGELIS JANNIS
(Title, Name, Surname)
KTH Royal Institute of Technology
(Institution of origin)
3. FLYTZANIS CHRISTOS
(Title, Name, Surname)
École Normale Supérieure
(Institution of origin)
4. MICHAILIDIS GEORGE
(Title, Name, Surname)
College of Literature, Science, and the Arts, University of Michigan
(Institution of origin)
5. Tsivolas Konstantinos
(Title, Name, Surname)
National Technical University of Athens
(Institution of origin)

II. Review Procedure and Documentation

Brief reference to the Panel preparation for the postgraduate study programme review, as well as to the documentation provided and considered by the Panel. Dates of the review, review, meetings held, and any additional information regarding the procedure, as appropriate.

The reviewing committee had the chance to receive all the necessary documentation for this PSP in advance and had ample time to study and process all the information within.

The committee had the pleasure of meeting the institution's management team on Tuesday 2 June 2026. In that first meeting, the following members of staff were present: Prof. Dimitrios Georgiou, Head of the Department and Director of PSP1 "Theoretical and Applied Mathematics", Associate Prof. Sotirios Kotsiantis, Deputy Head of the Department, Director of PSP2 "Computational and Statistical Data Analytics, MCDA", Prof. Jacobus Pieter van der Weele, OMEA member, Associate Prof. Konstantinos Petropoulos, OMEA member, Prof. Ioannis Venetis, President of MODIP and Fieroula Papadatou Head of MODIP. During that meeting there were two short presentations of the two PSPs to be accredited. Some short questions were asked by the committee to better orient themselves in the structure and delivery of this PSP. The slideshows of these presentations were sent to the committee for further study.

During the next two days, the committee had a chance to have a number of meetings with the teaching staff, the current students, the graduates and the external stakeholders of PSP1 (on the 3rd of June 2026) and PSP2 (on the 4th of June 2026).

The day concluded with an on-line tour: classrooms, lecture halls, libraries laboratories, and other facilities related to the three PSPs. The management thanked the committee for their valuable comments and pledged to take their recommendations seriously.

The whole process went smoothly, conducted in a friendly manner without any issues.

III. Postgraduate Study Programme Profile

Brief overview of the postgraduate study programme with reference to the following: history, academic remit, duration of studies, qualification awarded, employment opportunities, orientation challenges or any other key background information. Short description of the home Department and Institution, with reference to student population, campus or any other related facts.

The Postgraduate Studies Programme (PSP) in Computational and Statistical Data Analytics aims to deepen understanding and foster advanced research in mathematics and data and statistical analytics, as defined by its specialization areas. Graduates who earn the Master's Degree (MSc) will possess strong theoretical and applied training in data analytics and statistics, enabling them to either pursue doctoral studies or work professionally in higher education, research institutions, public services, private enterprises, or related organizations. Established in April 2018 (ΦΕΚ 1534/τ.Β'/04.05.2018), the programme offers a well-balanced academic curriculum combining theoretical foundations with practical applications of mathematics in data analytics and statistics. It grants an MSc in Computational and Statistical Data Analytics.

Admission is open to graduates from departments of mathematics and natural sciences and engineering, in Greek universities, as well as holders of equivalent degrees from recognized foreign institutions or related academic fields. The programme spans three academic semesters. To obtain the MSc degree, students must successfully complete at least eight courses and submit a master's thesis.

The PSP comprises a total of 90 ECTS credits and it is offered free of tuition fees.

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 in Computational and Statistical Data Analytics has established structured procedures to ensure and oversee the quality assurance of the programme.

Most of these processes are outlined in the M1 document, which provides an overview of quality commitments. The M1.1 document complements this with additional quality statements—partly overlapping with the M1—while the M1.2 document presents a table of performance goals and targets up to 31/12/2025, currently under review for potential updates.

The PSP fully complies with the European Qualifications Framework (EQF) and the Greek National Qualifications Framework for Higher Education at Level 7. It fulfills these standards by cultivating advanced knowledge, specialized analytical skills, and strategic competence for complex professional and research contexts.

Teaching excellence is promoted through a research-oriented, interdisciplinary curriculum delivered by experienced academics from participating departments and institutes. The programme employs innovative pedagogical methods and integrates fieldwork and collaborative projects that foster active learning and practical application. Ongoing evaluation mechanisms and mentoring support ensure alignment with international standards for postgraduate education and sustained academic quality.

A distinctive feature of the programme is its emphasis on face-to-face teaching, which cultivates direct interaction between students and faculty, reinforcing its research-intensive orientation and enhancing collaborative academic outcomes.

The PSP is supported by highly qualified staff from the Departments of Mathematics. All faculty members hold advanced academic credentials and possess significant research expertise relevant to the programme's focus areas.

Quality goals are reviewed annually through cooperation between the Internal Evaluation Group (IEG/OMEA) and the University's Quality Assurance Unit (QAU/MODIP). Administrative services, library access, and student welfare provisions complement academic strengths. Scholarship and mobility resources are efficiently managed to support teaching and infrastructure, while internal audits confirm the effectiveness of the quality assurance framework.

The programme addresses current labour market demand for skilled professionals in mathematics, data analysis and statistics. Robust administrative support, academic resources, and welfare services contribute to an enriched student experience, underpinning the programme's competitiveness and international relevance.

The University of Patras has demonstrated exemplary professionalism and transparency throughout the evaluation process. The submitted documentation is comprehensive, well-organized, and consistent with European and international standards, reflecting a strong institutional commitment to quality and strategic development. The University's prompt and cooperative responses to requests from the External Evaluation and Accreditation Panel (EEAP) further attests to its dedication to maintaining a rigorous and transparent accreditation process.

II. Analysis

The PSP aligns closely with its academic and institutional objectives through a well-designed curriculum that combines theoretical knowledge with practical

learning.

Compliance with EQF Level 7 and the Greek National Qualifications Framework verifies the programme's academic depth, critical approach, and problem-solving orientation. The participation of distinguished faculty from the Department of Mathematics promotes excellence in both teaching and research, while systematic quality assurance mechanisms—annual target-setting, audits, and resource management—sustain continuous improvement.

The programme's research-focused character, supported by specialized courses and publication opportunities, underscores its commitment to academic excellence and the advancement of scientific knowledge. These elements, together with strong labour market relevance and comprehensive student services, reflect institutional dedication to quality, innovation, and sustainability in postgraduate education.

III. Conclusions

The PSP fully satisfies Principle 1, supported by a coherent strategic framework, robust quality processes, and sound governance. Its full alignment with EQF Level 7 further guarantees academic integrity, rigour and relevance.

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 formal External Advisory Board, including selected alumni of the programme, that meets regularly with PSP faculty and administrators to provide feedback on curriculum, research integration, and overall programme quality.

R1.2: Organise a Welcome Event to new students at the beginning of their first semester, with the participation of the PSP management and faculty, to present the main elements of the programme to them and highlight the importance of their active participation and feedback to the quality of the programme.

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

The PSP in "Computational and Statistical Data Analytics" (MCDA), offered by the Department of Mathematics at the University of Patras, was established in April 2018 under ΦΕΚ 1534/τ.Β'/04.05.2018 to deliver an interdisciplinary, applied curriculum focused on data science, advanced modeling, and statistical analysis. The academic framework is structured across three semesters of full-time study and requires the completion of 90 ECTS credits, placing the program in full alignment with Level 7 of both the European Qualifications Framework and the Greek National Qualifications Framework. A major competitive advantage of the program is its completely tuition-free status, which removes financial barriers while providing advanced, research-intensive training. To earn the Master of Science (MSc) degree, students must successfully complete six core courses—four distributed in the first semester and two in the second—alongside two elective courses, culminating in a mandatory research or applied Master's Thesis during the final semester. Computational execution throughout the curriculum relies on modern programming environments, with a strong instructional emphasis on Python and R.

Admissions are open to a broad demographic of University graduates, drawing applicants from Departments of mathematics, statistics, natural sciences, computer science, engineering, economics, administrative sciences, and relevant military academies. The annual student intake is legally capped at a maximum of 30 individuals, who are selected through a rigorous two-stage evaluation process that culminates in a point ranking system factoring in undergraduate GPA, performance in specialized prerequisite courses, completion speed, prior thesis work, professional or research experience, and a mandatory oral interview. Historical data spanning the 2018 to 2025 academic cycles reveals a total of 158 student registrations, characterized by steady annual entry cohorts. Demographically, the student body exhibits a strong internal pipeline, with well over 50% of admitted students originating directly from the University of Patras Department of Mathematics, while the remaining enter from other academic units within Greece.

An analysis of student progression through May 2025 shows that out of the 158 total registered students since inception, 83 have successfully graduated, representing a 52.5% overall completion rate, while 19 students dropped out and 56 remain actively enrolled. Looking strictly at historical cohorts up to the 2021–2022 cycle, the graduation success rate rises to a robust 79.8%, with 75 out of 94 students completing their degrees. However, the data reveals that the actual time to degree completion averages 2.35 years, with a median of 2.30 years, indicating

that students frequently exceed the nominal 1.5-year structural timeline of the program. Graduating students achieve a high overall average MSc grade of 8.00 out of 10.00, though grading trends across individual components vary drastically. Students achieve the highest average marks in Numerical Methods (9.16), Survival Analysis (9.16), the Master's Thesis (8.99), and Decision Analysis (8.69), whereas the lowest average scores are observed in challenging foundational classes such as Probabilistic Models (5.67), Algorithms and Data Structures (6.49), and Applied Bayesian Statistics (6.68).

Programmatic governance and quality assurance are overseen through systematic collaborations between the Internal Evaluation Group (OMEA) and the University's Quality Assurance Unit (MODIP), utilizing specialized control templates to track performance targets. The programme's labor market alignment is strongly validated by an October 2023 graduate survey, which yielded 31 responses from a contacted population of 69 alumni. This tracking showed that 77% of respondents secured employment within the private sector, and 36% managed to find a data-analytics role directly relevant to their studies within 12 months of graduation, culminating in a 71% overall satisfaction rate among alumni who stated they would recommend the MCDA to others. To maintain this trajectory, the PSP manages its quality commitments via strategic planning targets extending to December 31, 2025, which are currently being updated to address specific operational shortfalls. These optimization goals explicitly include boosting historically low student evaluation response rates from a 5% baseline to an ambitious 75%, raising graduating student exit-survey participation from 0% to 50%, integrating three annual seminar lectures delivered by market experts, and expanding registered institutional alumni tracking from 2 to 10 members. Human resource sufficiency is maintained by a core teaching staff of 8 Faculty Members (ΔΕΠ) from the Department of Mathematics, supplemented by 5 external instructors from other Departments or Universities, 3 professors emeriti, and 3 dedicated administrative and technical staff members.

II. Analysis

The PSP demonstrates a strong structural blueprint that directly addresses the contemporary, high-growth demands of data science, mathematical modeling and computational data analysis. By designing a completely tuition-free framework, the University of Patras has created a highly competitive and socially inclusive gateway for Level 7 advanced qualification. The core curriculum is exceptionally well-balanced, successfully anchoring advanced mathematical theory with practical technical competencies in Python, R, Machine Learning, and Big Data frameworks. The market relevance of this approach is clearly illustrated by the graduate tracking data, which demonstrates rapid private-sector career absorption and strong long-term alumni satisfaction. Furthermore, the programme's student-centered governance model functions well on an individual level, providing clear grievance frameworks and assigning dedicated Academic Advisors to shepherd students through their studies.

Despite these clear operational strengths, the PSP's long-term sustainability faces distinct pressures that require active management. The most notable bottleneck

is the completion timeline; although advertised as a compact 1.5-year track, the average time to graduation stands at 2.35 years. This persistent delay indicates that a first-semester workload consisting of four heavy mathematical and computational core courses creates an intense credit hurdle that pushes many students past their nominal completion targets. This pressure is likely linked to the grading discrepancies across the curriculum, where the stark contrast between high-performing applied courses and low-performing foundational tracks suggests an imbalance in course difficulty or prerequisite readiness. Finally, the programme suffers from a historically low evaluation culture, evidenced by a critical 5% baseline student participation rate in course questionnaires. Relying on such an insular feedback mechanism restricts the internal data necessary for curriculum optimization, making the coordination team's target to elevate participation to 75% a vital corrective priority.

Crucially, formal discussions with current and past students revealed a stark disconnect between the PSP and the external labor market, with graduates explicitly stating that they secured their industry roles entirely on their own initiative and merit, without any departmental assistance or placement support. The department makes no proactive effort to host professional networking events, career days, or online talks featuring active corporate or commercial market participants. This institutional isolation was clearly reflected during the evaluation process itself, where the external stakeholders invited by the programme to participate came exclusively from the educational and academic sectors, completely lacking private industry representation. Furthermore, in direct interviews with the faculty of the PSP, professors demonstrated a pronounced lack of eagerness or initiative regarding the expenditure of effort required to build, maintain, and cultivate structured relationships with private enterprises and the broader industrial sector.

III. **Conclusions**

The PSP is supported by a professional, transparent internal quality framework and delivers an academically rigorous curriculum aligned with EQF Level 7 standards. However, it falls short of full maturity due to a severe, faculty-driven isolation from the corporate labor market.

Panel Judgement

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

Panel Recommendations

R2.1: Mandate an annual action plan for faculty-led career days, networking sessions, and industry talks, shifting the professional placement burden away from absolute student self-reliance.

R2.2: Review the four-course first-semester load and thesis workflow to identify bottlenecks, aiming to reduce the average 2.35-year graduation timeline toward the nominal 1.5-year limit.

R2.3: Direct the OMEA to investigate wide grade variances between courses (e.g., Probabilistic Models vs. Numerical Methods) to ensure uniform student workload and grading criteria.

R2.4: Partner with external stakeholders to introduce optional corporate internships or data-science hackathons, reinforcing the program's practical focus.

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

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

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

The student-centred learning and teaching process

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

In addition

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

Documentation

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

Study Programme Compliance

I. Findings

The PSP is structured over three academic semesters. The first two semesters comprise taught courses, while the third semester is dedicated to the preparation and completion of the Master's dissertation. During the first semester, all courses are compulsory and teaching activities are concentrated into two days per week in order to facilitate participation by working students. Due to the availability of elective courses during the second semester, a similar scheduling arrangement is not feasible. Information regarding course content, learning outcomes, assessment methods, and grading criteria is clearly described in the course outlines and communicated to students in advance. Student assessment is based on a combination of examinations, assignments, and presentations, depending on the nature of each course. The process for the selection and allocation of Master's dissertation topics is clearly defined. The PSP has established a formal mechanism for handling student complaints, as well as an Academic Advisor system that supports students academically and administratively. In addition, systematic evaluation of the individual courses is conducted electronically by students. During the meetings with the panel, students demonstrated awareness of the evaluation process. However, participation rates in the evaluation surveys were found to be particularly low. No guest lectures or seminars delivered by representatives of industry were identified during the accreditation process. Furthermore, according to the findings of the internal evaluation process, delays in the completion of Master's dissertations constitute a recurring issue. Although the programme has acknowledged this weakness, it continues to affect a significant number of students.

II. Analysis

The structure of the PSP is appropriate for achieving its intended learning outcomes. The concentration of compulsory courses into two days per week during the first semester facilitates participation by working students, while the range of elective courses in the second semester provides opportunities for academic specialization. Student assessment methods are clearly defined and communicated through the course outlines. The combination of examinations, assignments, and presentations supports the assessment of both theoretical knowledge and practical skills. The PSP has also established appropriate mechanisms for student support and quality assurance through the Academic Advisor system, the student complaints procedure, and the electronic course evaluation process. Nevertheless, the absence of guest lectures from industry representatives limits students' exposure to professional practice and labour market developments. In addition, the persistent delays in the completion of Master's dissertations suggest that further measures may be required to support students in completing their studies within the expected timeframe.

III. Conclusions

The PSP generally meets the expectations of Principle 3.

Panel Judgement

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

Panel Recommendations

R3.1: The PSP is encouraged to strengthen its interaction with industry and professional stakeholders through guest lectures, seminars, or other relevant activities.

R3.2: The PSP should further investigate the causes of delays in Master's dissertation completion and consider measures to support students in completing their studies within the expected timeframe.

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 maintains a clearly defined and publicly accessible regulatory framework governing all phases of the student lifecycle, from entry to graduation. The admission criteria and required documentation are transparently published, employing a rigorous two-stage selection process capped at 30 students that calculates final applicant rankings using a structured 500-point formula. Application and enrollment trends over the last four academic cycles demonstrate overall steady demand.

Student progression and academic rights are structurally supported by the mandatory assignment of an Academic Advisor to each incoming student, alongside institutionalized avenues for grievances handled via a three-member committee and the Student Advocate. To monitor progression and educational quality, the program utilizes formal course evaluation questionnaires coordinated by the institutional Quality Assurance Unit (MODIP). Historical MODIP data set summaries indicate an improving student participation curve; across these evaluation cycles, students consistently rated course objective clarity highly (averaging between 4.09 and 4.65) and judged course difficulty as moderate (ranging from a mean of 2.85 to 3.75).

Degree completion requires the accumulation of 90 ECTS credits over a nominal

duration of three semesters, and the program is entirely free of tuition fees. However, the program features no institutionalized internship frameworks or dedicated placement tracks, and the actual average time to complete the degree stands at 2.35 years, noticeably exceeding the nominal 1.5-year curriculum layout.

II. Analysis

The program excels in providing a transparent, fair, and legally compliant framework for student admissions and recognition, backed by comprehensive institutional documentation. The stable and upward-trending application pool over the last four cycles highlights the ongoing market appeal of the data analytics specialization. Furthermore, the recent surge of evaluation responses in the Winter 2025–2026 semester indicates that the program has successfully revitalized its student evaluation ecosystem, successfully moving past its historically low participation baseline to capture a highly reliable, data-driven window into student satisfaction. The high marks assigned to instructor organization and target clarity validate the overall pedagogical capabilities of the Department of Mathematics faculty.

Nevertheless, significant friction points remain regarding student progression and the practical application of studies. The persistent gap between the intended 1.5-year program duration and the actual 2.35-year graduation average proves that structural delays—likely stemming from an intensive first-semester credit load and extended thesis timelines—remain unmitigated. This extended duration delays student entry into the workforce, which is further exacerbated by a lack of institutional scaffolding for career transitions. Because there are no formalized internship pathways, industrial partnerships, or corporate placement support embedded within the regulations, students are forced to navigate the labor market entirely on their own initiative. While the program successfully delivers Level 7 academic training, it acts as an insular pipeline that relies heavily on student self-reliance to turn academic certification into professional employment.

III. Conclusions

The PSP provides clear, formalized regulatory pathways and features a drastically improved internal evaluation culture, but it remains hampered by prolonged graduation timelines and an absence of structured labor market integration.

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: Formalize procedures within the study guide allowing students to undertake optional, credit-bearing industrial internships or corporate data-science capstone projects in lieu of a purely theoretical thesis.

R4.2: Task the Coordinating Committee and Academic Advisors to systematically track students who cross the 1.5-year nominal threshold, introducing milestone check-ins to actively lower the 2.35-year average graduation timeline

R4.3: Leverage the robust student feedback captured in the expanded 2025–2026 MODIP surveys to pinpoint the exact modules driving up perceived course difficulty during specific semesters.

PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES

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

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

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

Documentation

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

Study Programme Compliance

I. Findings

The Department of Mathematics of the University of Patras opted fall 2018 through an internal procedure for the organization of the Postgraduate Study Program in two PSPs: Theoretical and Applied Mathematics (THEMA) and Computational and Statistical Data Analysis (MCDA). This was supported and approved by the Quality Assurance Policy (EEAP) following the Accreditation Panel of Fall 2020 and implemented Fall 2023 starting with the organization of the Teaching Staffs and the Education Programs for both PSP and the first indications of Funds and relevant Facilities are presented in the present Accreditation report with proper attention to the specific aspects of the two PSPs and their evolution. The teaching staff of the Department of Mathematics consists of qualified and research-active teachers all committed to their duties and committed to attract

and hire qualified researchers and apply high standards in teaching and research and address certain issues in the student achievements in regard to graduation, duration of studies, involvement in the diploma work and counseling for postgraduate activities in both professional and academic sectors.

These issues were briefly touched in the presentations during the Accreditation Process and additional information was obtained in the related meetings of the Accreditation Committee and documents accessible on-line.

II. Analysis

In this context for MCDA the prime issue is to hire new members in the DM in replacement of the many retired ones and consequently increase their overall number with additional ones for the new areas introduced in the postgraduate program through MCDA and open a new range of professional sectors for the graduates and also impact the collaborations with other departments of the University of Patras and beyond.

Particular attention should be paid to the fact that the teaching staff up till presently consisted primarily of members of the Department of Mathematics of the University of Patras and this led to very reduced interactions and exchanges with other institutions, both national and foreign, and this should be properly addressed by the PSP.

In this respect the procedures for the selection, evaluation and development of teaching staff in new directions requires diversity in the qualifications, research activities and experience which can be best acquired by interactions with and the involvement of members of other Institutions and this has implications in all aspects of the activities of the Teaching Staff and in particular diversity in training in PSP, in research and professional sectors.

This in particular has strong impact in the overall education and training of students in the postgraduate program and specifically in the student choices for their professional and academic sectors after the graduation. This needs personal contact of student and teacher in connection with the diploma work and some concrete support to the student.

These issues are central for the PSP and necessitate consequent support by the University of Patras and National Authorities of Higher Education.

III. Conclusions

The PSP MCDA is one of the pillars of the overall Postgraduate Study Program in the Department of Mathematics in the University of Patras and connects it with a wide range of areas in Applied Mathematics and Data Sciences and contributes to the visibility of the University of Patras at both national and international levels.

This organization of the PSP requires consequent support primarily in the hiring of new members for teaching and research in addition to the scheduled replacement of the retired ones and additional funds and facilities. It is stressed that in hiring new members diversity in their training should be favored and collaborations with National and European Institutions should be promoted.

It also requires appropriate and concrete support for the enrolled students as regards the choice of specific courses, diploma work and in their professional initiation.

Panel Judgement

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

Panel Recommendations

P5.1: In its initial stage the reorganization of the PSP MCDA of the University of Patras requires consequent support primarily in the hiring of new members for teaching and research in addition to the scheduled replacement of the retired ones and additional funds and facilities by the University and the National Education Authorities and possibly European ones.

P5.2: Its collaboration and exchanges with other Institutions in particular in Europe should be substantially increased both for the Teaching Staff and the students in particular as regards their diploma work and Ph.D.

P5.3: It also requires appropriate and concrete support for the enrolled students as regards the choice of specific courses, diploma work and in their professional initiation.

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 LEARNING AND STUDENT SUPPORT, AND – ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

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

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

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

Documentation

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

Study Programme Compliance

I. Findings

The PSP is delivered entirely through face-to-face teaching and is supported by the infrastructure and facilities of the Department of Mathematics. Students have access to a range of educational and research resources that support both teaching and research activities. In particular, the Department maintains several specialized research laboratories, including the Computer Applications Laboratory, the Educational Software Development Laboratory (ESD*Lab), the Statistics and Operations Research Laboratory, and the Computational Intelligence Laboratory (CILab), all of which are directly related to the scientific fields covered by the PSP. Students have full access to the University Library and

its services. The library provides printed and electronic information resources, while dedicated equipment and services are available to facilitate access for students with disabilities. In addition, students are supported through the Open eClass asynchronous learning platform, which is used for the distribution of educational material and communication related to course activities. Administrative support is facilitated through an electronic secretariat system, allowing students to submit applications and complete a wide range of administrative procedures electronically. At the institutional level, students have access to a comprehensive framework of support services, including the Student Ombudsman, psychosocial and counselling support services, psychological support services, and medical support services. Furthermore, the academic advisor system is actively implemented within the PSP. Students demonstrated awareness of this mechanism and confirmed that they are informed about the support available through their academic advisors. During the meetings with the panel, students indicated that no formal induction event is currently organized for newly admitted students.

II. Analysis

The PSP benefits from adequate educational, research, and administrative resources that support the effective implementation of its educational objectives. The availability of specialized laboratories that are closely related to the programme's scientific areas enriches the learning environment and provides opportunities for students to engage with contemporary research tools and methodologies. Access to library resources, including provisions that facilitate accessibility for students with disabilities, supports inclusive participation and access to academic material. The operation of the electronic secretariat enhances administrative efficiency and facilitates communication between students and the programme administration. Student support is further strengthened through the availability of multiple institutional services addressing academic, personal, and health-related needs. The implementation of the academic advisor system contributes positively to student guidance and academic support throughout the duration of the programme. However, the absence of a structured induction process may limit students' awareness of the full range of academic, administrative, and support services available within the institution, particularly during the initial stages of their studies.

III. Conclusions

The PSP meets the expectations of Principle 6.

Panel Judgement

Principle 6: Learning resources and student support

Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

R6.1: The PSP should consider introducing a formal induction process for newly admitted students to enhance their awareness of the programme, institutional and student support services.

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 University of Patras provides a comprehensive platform, my.upatras.gr, which includes several portals for a variety of services and facilities with extensive statistical data concerning activities and achievements for both student and staff populations inclusive evaluations course timetables, exam data for the different units of the University and specifically for the PSPs with additional data concerning performances, publications, collaborations and links between them and other institutions, reorganizations etc.

II. Analysis

All this information in particular is used by the staff and other instances for PSP management and can also be used by the students but at presently appears

incomplete and underutilized by them; this is also the case for the Alumni services but their use is improving.

III. **Conclusions**

The PSP collects and analyses data related to quality assurance and its performance and steps are taken to improve and extend their use.

Panel Judgement

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

Panel Recommendations

R7.1: The presentation and analysis of collected statistical data for PSP management are useful.

R7.2: Their use by students appropriately selected can be used during the lifecycle of their studies.

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 of Mathematics and PSP websites are available in both Greek and English and are well organized, user-friendly, and easy to navigate. Both versions provide comprehensive information for prospective and current PSP students, including study plans, course materials, codes of conduct, research activities, quality assurance policies, procedures for submitting student complaints, contact information for faculty and administrative staff, and relevant university and departmental regulations, policies, and guidance documents. The websites serve as a central and accessible source of academic and administrative information, supporting transparency and effective communication with students and other stakeholders.

II. Analysis

The department website is available in both Greek and English and provides a comprehensive range of information for prospective and current students. Both versions include material typically found in a study guide, as well as broader departmental information, such as the structure and organization of the PSP, curriculum details, course descriptions and reading materials, faculty profiles and contact information, examples of recent theses, thesis submission procedures and forms, announcements, and upcoming events. The content is organized into clearly defined sections, enabling users to locate relevant information quickly. A notable difference between the two language versions is that the English website is updated less frequently than the Greek version, particularly with respect to seminar announcements and departmental events. This may be a minor issue since the PSP is taught in Greek, but it does also reduce potential interest from a broader audience, especially as it relates to events and news which may interest social partners or companies in the region.

III. Conclusions

While the PSP is taught in English, the department provides a bilingual website in Greek and English, and most of the information is common to both websites. It provides the relevant and necessary information on the department, faculty contacts and PSP courses and structure. However, information on events and ongoing activities are not kept as up to date on the English website.

Panel Judgement

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

Panel Recommendations

R8.1 Ensure that the events are updated in the English website as well, to strengthen PSP interest from a broader audience.

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 individual courses of the PSP are subject to continuous monitoring and periodic internal evaluation. The internal evaluation process is conducted with the support of MODIP. The results are communicated to the programme coordinators and the relevant faculty members for review and consideration. The overall analysis of the study programme is informed by data collected from multiple sources, including course evaluations, assessments of teaching methods, student feedback and perceptions, and indicators of student progression and achievement. However, the systematic collection of feedback from graduates and social partners remains limited.

II. Analysis

The PSP systematically collects data through student evaluations, which assess the quality of courses, teaching practices, and instructor performance. These evaluations are the primary mechanism for programme assessment and for identifying areas where improvements or adjustments may be required. Students generally perceive the PSP as aligned with their expectations, needs, and the objectives that motivated their enrolment. Several students continue their studies by joining doctoral programmes, mainly in US universities. However, the programme has only limited structured mechanisms for obtaining feedback from external stakeholders and recent graduates. Establishing a more systematic approach to collecting and analysing such feedback would strengthen the programme's capacity to respond to evolving student and societal needs, enhance its relevance, and support its continuous improvement and development.

III. **Conclusions**

The PSP is evaluated primarily through student surveys and feedback meetings. The information collected is systematically analysed and used to inform improvements and adaptations to the programme's courses, ensuring their quality, effectiveness, and continued relevance. However, graduates and social partners are not yet systematically involved in the evaluation process, limiting the range of perspectives available for programme enhancement. Overall, the Panel finds that the PSP is substantially compliant with Principle 9.

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's evaluation and monitoring should incorporate more systematic input from programme graduates and external stakeholders to strengthen the programme's relevance.

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

According to the official internal evaluation document, the PSP is currently navigating its first formal external accreditation cycle.. As a baseline, the university's Quality Assurance Unit (MODIP) finalized a lawful internal review on January 26, 2024. The review validated the program's compliance with Law 4957/2022 and identified core institutional strengths, highlighted by a prestigious faculty body whose researchers ranked in the top 2% of the World's Top Scientists from 2019 through 2022. MODIP also lauded the PSP's cross-departmental structure, domestic and international university networks, flexible curriculum, Erasmus+ placement options, and its accessible, tuition-free framework. Conversely, the report flagged critical weaknesses: chronically low student participation in course evaluations, a student demographic overly concentrated within the local Mathematics Department, systematic delays in completing Masters theses, and low student representation at national scientific conferences. To address these friction points, MODIP mandated a corrective action plan with a strict deadline of December 31, 2024, tasking the PSP Director with spearheading survey awareness, expanding multi-departmental web marketing, intensifying advisor-led thesis monitoring, and coordinating with the Special Account for Research Funds (ELKE) to secure student travel funding.

II. Analysis

This inaugural cycle reveals a PSP built on a strong academic foundation but held back by operational bottlenecks. While the faculty's global research standing offers immediate international prestige and the zero-tuition model ensures merit-based access, the programme operates in relative isolation, failing to draw diverse

STEM graduates to enrich its interdisciplinary data analytics environment. Furthermore, low evaluation turnouts leave quality assurance mechanisms partially blind, while unmonitored thesis timelines prolong the time-to-degree. The 2024 MODIP action plan targets the right structural fixes, but the PSP's evolution relies entirely on shifting these mandates from paper targets into real actionable improvements.

III. Conclusions

The PSP showcases a legally rigorous internal evaluation framework that must now demonstrate long-term operational impact.

Panel Judgement

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

Panel Recommendations

R 10.1: Present a comprehensive progress report to the EAAP regarding the measurable impacts of the December 2024 directives, specifically proving an upward shift in student evaluation participation and a more diversified enrollment pool.

PART C: CONCLUSIONS

I. Features of Good Practice

This PSP is positioned at the forefront of data science and applied mathematics.

It is led by outstanding, internationally recognized faculty with deep expertise in their respective fields.

Graduates hold the programme in high regard and have expressed a strong interest in maintaining and expanding collaboration.

II. Areas of Weakness

Although stakeholders have expressed an interest in collaborating with the PSP, there appears to be no formal mechanism in place to facilitate such engagement, and an External Advisory Board has not been established. Connections with alumni also seem to be non-existent.

There is no mechanism to incorporate systematic input from PSP graduates and external stakeholders.

It seems that there is no concrete support for the enrolled students as regards the choice of specific courses, diploma work and professional initiation.

It seems that corporate internships for the practical work of students are not appropriately supported or encouraged so far.

III. Recommendations for Follow-up Actions

It is recommended that an External Advisory Board be established to enable industry representatives to contribute to the strategic development and direction of the PSP.

A formal alumni network, including a dedicated website, should be created in order to strengthen engagement and capitalize on alumni experience, professional expertise, and mentoring opportunities.

Student mobility should be enhanced through greater utilisation of Erasmus+ and other international exchange initiatives.

A medium-term staffing strategy should be developed to ensure the consistent delivery of both core and elective courses, thereby strengthening curricular continuity and long-term sustainability.

Finally, structured collaborations with industry should be further developed through internships, co-supervised Master's projects, guest lectures, and the integration of applied case studies into the curriculum.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are:

1, 6, 8

The Principles where substantial compliance has been achieved are:

2, 3, 4, 5, 7, 9, 10

The Principles where partial compliance has been achieved are:

none

The Principles where failure of compliance was identified are:

none

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

The members of the External Evaluation & Accreditation Panel

Name and Surname	Signature
KYRITSIS DIMITRIOS	Signed by KYRITSIS DIMITRIOS - 16/06/2026 19:48:27 +03:00
ANGELIS JANNIS	Signed by ANGELIS JANNIS - 16/06/2026 19:48:27 +03:00
FLYTZANIS CHRISTOS	Signed by FLYTZANIS CHRISTOS - 16/06/2026 19:48:27 +03:00
MICHAILIDIS GEORGE	Signed by MICHAILIDIS GEORGE - 16/06/2026 19:48:27 +03:00
Tsivolas Konstantinos	Signed by Tsivolas Konstantinos - 16/06/2026 19:48:27 +03:00