



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



**Εθνική Αρχή
Ανώτατης Εκπαίδευσης**
Hellenic Authority
for Higher Education

Αριστειδου 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 New Undergraduate Study Programme in
operation of:

Mathematics

Institution: University of Western Macedonia

Date: 30 June 2024



Με τη συγχρηματοδότηση
της Ευρωπαϊκής Ένωσης



Πρόγραμμα
Ανθρώπινο Δυναμικό και
Κοινωνική Συνοχή



Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation of **Mathematics** of the **University of Western Macedonia** comprised 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. New Undergraduate Study Programme in operation Profile.....	7
Part B: Compliance with the Principles.....	8
Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit	8
Principle 2: Quality Assurance Policy of the Institution and the Academic Unit.....	15
Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes	18
Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students	21
Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes	24
Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes.....	27
Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes	30
Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes.....	33
Principle 9: Public Information Concerning the New Undergraduate Programmes.....	35
Principle 10: Periodic Internal Review of the New Study Programmes.....	38
Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes	40
Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones	42
Part C: Conclusions	43
I. Features of Good Practice.....	43
II. Areas of Weakness.....	43
III. Recommendations for Follow-up Actions	44
IV. Summary & Overall Assessment	45

PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new undergraduate study programme in operation of **Mathematics** of the **University of Western Macedonia** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Nikolaos Dimakis (Chair)**
University of Texas Rio Grande Valley (UTRGV), Edinburg, USA
- 2. Prof. Nikos Stylianopoulos**
University of Cyprus, Nicosia, Cyprus
- 3. Prof. Jannis Angelis**
KTH Royal Institute of Technology, Stockholm, Sweden
- 4. Mr. Stylianos Sfondylis, Undergraduate Student**
Aristotle University of Thessaloniki, Thessaloniki, Greece

II. Review Procedure and Documentation

The Hellenic Authority for Higher Education (HAHE) assembled a highly qualified external evaluation accreditation panel (EEAP) of experts. This panel was tasked with assessing the compliance of the undergraduate study program (USP) “Mathematics” from the University of Western Macedonia (UoWM). The EEAP was responsible for drafting an accreditation report in accordance with the HAHE quality assurance requirements (laws 4009/2011 & 4653/2020). The USP assessment was conducted through document reviews and online interviews with academic staff, USP students and graduates, and external stakeholders. The method used was an evidence-based process centred on sampling the USP’s activities. It aimed to evaluate the fulfilment of the HAHE requirements of the relevant USP quality assurance standards and comment on their compliance, effectiveness, and applicability. The information provided by the USP was assumed to be factually correct. The evaluation and accreditation were conducted remotely using the Zoom platform, including the private meetings with the EEAP members.

The EEAP met online for the first time on Tuesday, June 25, 2024, from 16:00 to 18:00 (Eastern European Time -EET) to facilitate acquaintance and establish a working approach for accreditation procedures. On the same day, the EEAP review of the USP study program formally began at 18:30 (EET). During 18:30–19:00 (EET), the EEAP met with the Vice-Rector of Academic Affairs/President of the quality assurance unit (MODIP), Prof. Nikolaos Sariannidis, and the Head of the Department of Mathematics, Prof. Antonios Bisbas. The President of MODIP and the Head of the Department of Mathematics gave short presentations on the UoWM and the USP, respectively, and answered EEAP-related questions.

From 19:15 to 21:15, the EEAP had the opportunity to meet with the internal evaluation unit (OMEA) members Assis. Prof. Georgios Vasiliadis, Assis. Prof. Georgios Psaradakis and Ms. Maria Paliouri, the latter serving as the OMEA member student representative, were present at the meeting. Prof. Nikolaos Sariannidis, Vice-Rector of Academic Affairs/President of MODIP, was also present. During the meeting, OMEA members presented how the USP meets the twelve quality assurance targets.

The day ended with the EEAP private meeting from 21.15 to 21:45 (EET), during which the members discussed their impressions of the first day and prepared for the second day of the online review.

On June 27, 2024, during 16:00–16:45 (EET), the EEAP met with the USP teaching staff: Prof. Zacharoula Kalogiratou, Prof. Theodoros Monovasilis, Prof. Nikolaos Tsounis, and Assistant Prof. Michalis Markellos, Assistant Prof. Christos Tatakis, Assistant Prof. Christina Karafillia, and Associate Prof. Nikolaos Dimokas to discuss USP professional development opportunities, mobility, and teaching methods. Later, the same day, during 17:00–17:45 (EET), the EEAP met with 11 current USP students to discuss their satisfaction and study experiences.

During 18:00–19:00 (EET), the EEAP attended an online tour of various facilities, including classrooms, lecture halls, and libraries, through a video that was provided to the EEAP. During this meeting, the EEAP met with the USP Mathematics administration staff Assistant Prof. Georgios Vasiliadis, Informatics Laboratory, PhD Candidate Kleopatra Gkola, Informatics Laboratory, Athanasios Bourtzos, Library Representative, Christina Natsi, Department of Mathematics Secretary, Konstantina Georgiadou, Career Office Alumni Representative, and Dimitrios Tarnanidis, MYFEO and Holistic Care Representative.

Afterward, from 19:30–20.15 (EET), the EEAP met and discussed with the following employers and social partners: Evgenia Marneri, Director of Secondary Education in Kastoria Prefecture, Lemonia Boutskou, Mathematics Education Consultant in Western Macedonia, Konstantinos Zygoris, Mathematician, Director of Model High School of Kastoria, Spyridon Dimou, Mathematician, President of the Kastoria Branch of the Hellenic Mathematical Society, Maria Roussouli, Mathematician, Secondary Education Teacher, currently placed in Brussels, mentor of Greek Women Mathematicians, Mr. Dionysios Takouridis, Mathematician, tutoring school

owner, and Dimitrios Savvopoulos, Vice Governor in the Regional Unit of Kastoria. In this meeting, there was a discussion about the relations of the department with external stakeholders from the private and the public sector.

From 20:15 to 20:45 (EET), the EEAP held a private meeting to discuss the evaluation's outcomes and prepare the debriefing report. The debriefing meeting took place from 20:45 to 21:15 (EET), during which the EEAP met with OMEA & MODIP representatives, the Vice-Rector/President of MODIP, and the Head of the Department. In this final meeting, the EEAP provided an overview of some of the conclusions reached.

During the following days (27–30 June 2024), the EEAP received additional information from MODIP and evaluated the content to complete the draft of the accreditation report.

III. New Undergraduate Study Programme in operation Profile

The UoWM is a distributed campus institution of higher education located in five cities in West Macedonia, Greece. The UoWM Department of Mathematics falls under the broader scientific field of 05 Natural Sciences, Mathematics, and Statistics, as categorized by UNESCO (ISCED 2013). Specifically, it is classified under 054-Mathematics and Statistics, 0541 Mathematics. The department is in the city of Kastoria.

The USP was founded by decision No.4610/07.05.2019 as approved by the UoWM's Senate (meeting no. 6161/03-07- 2019). It is governed by the provisions of Law 4957/2022, the Internal Regulations of the UoWM for undergraduate studies, and the Internal Regulations of the Department of Mathematics.

The USP in Mathematics has 6 permanent faculty members (ΔΕΠ). Seven other faculty members from other UoWM departments and 12 temporary teaching staff also teach on the USP. The head of the Department of Mathematics is a faculty member of the Department of Electrical and Computer Engineering.

The number of active USP students per academic year is as follows: 42 students for 2019-20, 67 students for 2020-21, 17 students for 2021-22, 27 students for 2022-23, and 20 students for 2023-24. The USP graduated 9 students in the academic year 2019-20, which corresponds to about a 21.4% graduation rate.

The USP is an eight-semester 240 ECTS program (60 ECTS per semester) that aims to:

- a. Provide advanced training for high-quality mathematicians.
- b. Expand and promote theoretical and applied knowledge in the undergraduate program's subjects.
- c. Educate scientists capable of pursuing postgraduate studies.
- d. Train professionals with strong theoretical backgrounds and advanced skills.
- e. Equip students to work as professional executives in positions of increased responsibility in the private sector and in government.

The USP program of study closely resembles that of other USP programs at Greek Universities, and the language of instruction is Greek. In this program, students only need to take mandatory courses during the first two years of their studies, whereas several elective courses are available in years 3 and 4 of the program.

Students can take 6 courses (i.e., 30 ECTS) in addition to the 240 ECTS workload to obtain a learning license, which is a mandatory qualification for teaching in secondary education in Greece. Optional practical training is available to the students, which is equivalent to 3 ECTS, and is available to the USP students who are in their 5th semester or higher. This option became available for the first time in the 2022-23 academic year, and 6 USP students chose to pursue this opportunity. The practical training is optional as an elective course, does not count towards the degree grade, does not replace any other course, and is recorded in the diploma supplement.

Students have the option to undertake an undergraduate Thesis. This Thesis can be chosen as an elective course in the 8th semester of studies, according to the terms described in the Thesis Regulation, and is equivalent to two elective courses (i.e., 12 ECTS).

There are no tuition or other fees for this USP.

An external committee has not evaluated the USP before.

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit

Institutions must have developed an appropriate strategy for the establishment and operation of new academic units and the provision of new undergraduate study programmes. This strategy should be documented by specific feasibility and sustainability studies.

By decision of the institutional Senate, the Institutions should address in their strategy issues related to their academic structure in academic units and study programmes, which support the profile, the vision, the mission, and the strategic goal setting of the Institution, within a specific time frame. The strategy of the Institution should articulate the potential benefits, weaknesses, opportunities or risks from the operation of new academic units and study programmes, and plan all the necessary actions towards the achievement of their goals.

The strategy of their academic structure should be documented by specific feasibility and sustainability studies, especially for new academic units and new study programmes.

More specifically, the feasibility study of the new undergraduate study programmes should be accompanied by a four-year business plan to meet specific needs in infrastructure, services, human resources, procedures, financial resources, and management systems.

During the evaluation of the Institutions and their individual academic units in terms of meeting the criteria for the organisation of undergraduate study programmes, particular attention must be placed upon:

a. The academic profile and the mission of the academic unit

The profile and mission of the department should be specified. The scientific field of the department should be included in the internationally established scientific fields of Higher Education, as they are designated by the international categorisation of scientific fields in education, by UNESCO (ISCED 2013).

b. The strategy of the Institution for its academic development

The academic development strategy for the operation of the department and the new study programme should be set out. This strategy should result from the investigation of the factors that influence the studies and the research in the scientific field, the investigation of the institutional, economic, developmental, and social parameters that apply in the external environment of the Institution, as well as the possibilities and capabilities that exist within the internal environment (as reflected in a SWOT Analysis: strengths, weaknesses, opportunities, and threats). This specific analysis should demonstrate the reason for selecting the scientific field of the new department.

c. The documentation of the feasibility of the operation of the department and the study programme

The feasibility of the operation of the new department should be justified based on:

- *the needs of the national and regional economy (economic sectors, employment, supply- demand, expected academic and professional qualifications)*
- *comparison with other national and international study programmes of the same scientific field*
- *the state-of-the-art developments*

- *the existing academic map; the differentiation of the proposed department from the already existing ones needs to be analysed, in addition to the implications of the current image of the academic map in the specific scientific field.*

d. The documentation of the sustainability of the new department

Mention must be made to the infrastructure, human resources, funding perspective, services, and all other available resources in terms of:

- *educational and research facilities (buildings, rooms, laboratories, equipment, etc.)*
- *staff (existing and new, by category, specialty, rank and laboratory). A distinct five-year plan is required, documenting the commitment of the School and of the Institution for filling in the necessary faculty positions to cover at least the entire pre-defined core curriculum*
- *funding (funding possibility from public or non-public sources)*
- *services (central, departmental / student support, digital, administrative, etc.)*

e. The structure of studies

The structure of the studies should be briefly presented, namely:

- **The organisation of studies:** *The courses and the categories to which they belong; the distribution of the courses into semesters; the alignment of the courses with the European Credit Transfer System (ECTS).*
- **Learning process:** *Documentation must be provided as to how the student-centered approach is ensured (modes of teaching and evaluation of students beyond the traditional methods).*
- **Learning outcomes:** *Knowledge, skills and competences acquired by graduates, as well as the professional rights awarded must be mentioned.*

f. The number of admitted students

- *The proposed number of admitted students over a five-year period should be specified.*
- *Any similar departments in other HEIs with the possibility of student transfers from / to the proposed department should be mentioned.*

g. Postgraduate studies and research

- *It is necessary to indicate research priorities in the scientific field, the opportunities for interdisciplinary research, the challenges towards new knowledge, possible research collaborations, etc.*
- *In addition, the postgraduate and doctoral programmes offered by the academic unit, the research projects performed, and the research performance of the faculty members should be mentioned.*

Relevant documentation

- *Introductory Report by the Quality Assurance Unit (QAU) addressing the above points with the necessary documentation*
- *Updated Strategic Plan of the Institution that will include its proposed academic reconstruction, in view of the planned operation of new department(s) (incl. updated SWOT analysis at institutional level)*
- *Feasibility and sustainability studies for the establishment and operation of the new academic unit and the new study programme*
- *Four-year business plan*

Study Programme Compliance

I. Findings

a. The academic profile and the mission of the academic unit

The Department of Mathematics was established in 2019 in accordance with Law 4610/07.05.2019, which pertains to the Synergies of Universities and Technological Educational Institutes (Government Gazette No. 4610/07.05.2019, Issue 70).

The Department of Mathematics is based in Kastoria and is part of the School of Sciences. It welcomed its first students in the academic year 2019-2020. According to the National Qualifications Framework, it offers a Bachelor of Mathematics degree (without specializations or directions) and is classified at Level 6 (equivalent to a Bachelor's degree).

The academic profile of the UoWM Department of Mathematics focuses on teaching mathematics, cultivating mathematical thinking, and developing fundamental research in the fields of Algebra, Analysis, Numerical Analysis, Geometry, Statistics, and Operational Research.

The department's mission includes, among other things, the education of high-quality, scientifically trained mathematicians capable of being employed at all levels of education and in a variety of other private and public sector professions. Additionally, the department prepares its graduates for new areas in the science and profession of Mathematics, keeping pace with international developments. Moreover, its mission is to play an active role in the local community.

b. The strategy of the Institution for its academic development

The department has a limited faculty (6) supported by administrative and extra teaching staff. Two more faculty positions are available in the future as part of the department's planned academic development. All faculty have opportunities to attend conferences (one funded per year per person) and can spend time visiting other institutions *ad hoc*, provided that the teaching is covered by a colleague.

c. The documentation of the feasibility of the operation of the department and the study programme

The department has processes in place to ensure its operations are effective and align with the USP. The USP has a suitable and comprehensive quality assurance policy in place, which is communicated to all parties interested (e.g., members of the teaching and administrative staff, external stakeholders, and students). It is also publicly available on the department website. From the submitted accreditation documentation and the meetings with the department representatives, it was evident to the EEAP that the quality assurance policies were used appropriately. The faculty works closely with the MODIP, which supports the USP delivery. There is an annual review process for the evaluation of individual courses and of the program based on information available, including student course evaluations.

d. The documentation of the sustainability of the new department

A long-term business plan covers infrastructure, service needs, financial resources, and processes needed for program viability. A comprehensive SWOT analysis has been conducted and used to inform the strategy and development of the USP. This covers the development of the faculty, modules, and physical and financial resources needed to make the program successful and viable long term.

e. The structure of studies

The USP structure has core courses for years 1 and 2 and with electives being introduced for years 3 and 4. The core modules cover the fundamentals and are taught by the department faculty. Many of the electives are taught by faculty from other departments since the USP student partake their courses given by other departments. All modules are 6 ECTS, and many are examined through a mix of methods (i.e., not only a final module exam). There is also a practice module for 3 ECTS, which participant students register in their degree transcript, but which is not counted towards the total.

f. The number of admitted students

The proposed number of USP yearly admitted students is 100 at max for the next five-year period. The actual number of active USP students per academic year is as follows: 42 students for 2019-20, 67 students for 2020-21, 17 students for 2021-22, 27 students for 2022-23, and 20 students for 2023-24. This low number of students is primarily attributed to transfers to other HEIs, whereas there is no evidence of students transferring from other HEIs to this USP.

g. Postgraduate studies and research

The Department of Mathematics offers doctoral studies but no postgraduate degrees. Its Doctoral Studies Regulation was approved by the department's Provisional Assembly in its 17th session on 18/11/2021 and by the Senate of the UoWM and published in the Government Gazette, Volume B, No. 6648, on 31/12/2021.

II. Analysis

The EEAP found that the quality assurance policy is implemented and has the support and engagement of the faculty, administrators, and students. The quality goals are set and revisited annually and clearly stated. Relevant Key Performance Indicators (KPIs) are set by the MODIP in collaboration with the USP director and the department head. They are comprehensive and fit for purpose. They are communicated to all faculty members, recorded, and followed up as needed. The quality assurance policy is also shared with the students. However, student contributions through the completion of end-of-course evaluation surveys are limited, and the department and the faculty should seek ways of further engaging the students. The faculty clearly showed awareness of the issue and have tried to improve this. Students interviewed by the EEAP explained that the close informal dialogue they had with the staff meant that many students did not feel surveys were important. The USP is still a young program, so there is a notable opportunity to use feedback from the students and social partners to modify and improve both courses and program structure.

Plans and resources are in place to grow the program. The main limiting factor is low pass rates in the USP courses, which significantly decrease graduation rates.

The EEAP found that the faculty is aware of other leading programs and the needs placed by the labour market and has developed the USP and its selection of modules with these in mind.

The USP course organization follows a typical structure of ECTS per semester, with core modules in the early years and electives in later ones. The modules are taught explicitly with a student-centred approach, as also evident from faculty and students interviewed by the EEAP.

While the program and the department are both relatively new, the doctoral program is active, and many current students are planning or even applying for postgraduate studies. This is indicative of the research priorities placed in USP.

III. Conclusions

The EEAP concludes that the USP is fully compliant with Principle 1, with all sub-categories being fully compliant except sub-category f, which is related to the number of admitted students and is substantially compliant.

Panel Judgement

Principle 1: Strategic planning, feasibility and sustainability of the academic unit	
a. The academic profile and the mission of the academic unit	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
b. The strategy of the Institution for its academic development	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
c. The documentation of the feasibility of the operation of the department and the study programme	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
d. The documentation of the sustainability of the new department	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
e. The structure of studies	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	
f. The number of admitted students	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	
g. Postgraduate studies	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Principle 1: Strategic planning, feasibility and sustainability of the academic unit (overall)	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- The USP should work on attracting more incoming students and retaining them in the program.
- The USP needs to improve its graduation rate to align with the program growth strategy, without compromising teaching quality or student skills development.

Principle 2: Quality Assurance Policy of the Institution and the Academic Unit

The Institution should have in place an accredited Internal Quality Assurance System, and should formulate and apply a Quality Assurance Policy, which is part of its strategy, specialises in the operation of the new academic units and the new study programmes, and is accompanied by annual quality assurance goals for the continuous development and improvement of the academic units and the study programmes.

The quality assurance policy of the Institution must be formulated in the form of a published statement, which is implemented by all stakeholders. It focuses on the achievement of special annual quality goals related to the quality assurance of the new study programme offered by the academic unit. In order to implement this policy, the Institution, among others, commits itself to put into practice quality procedures that will demonstrate: the adequacy and quality of the academic unit's resources; the suitability of the structure and organisation of the curriculum; the appropriateness of the qualifications of the teaching staff; the quality of support services of the academic unit and its staffing with appropriate administrative personnel. The Institution also commits itself to conduct an annual internal evaluation of the new undergraduate programme (UGP), realised by the Internal Evaluation Group (IEG) in collaboration with the Quality Assurance Unit (QAU) of the Institution.

The quality assurance policy of the academic unit includes its commitment to implement quality procedures that will demonstrate: a) the adequacy of the structure and organisation of the curriculum, b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education, c) the promotion of the quality and effectiveness of the teaching work, d) the adequacy of the qualifications of the teaching staff, e) the promotion of the quality and quantity of the research work of the members of the academic unit, f) the ways of linking teaching with research, g) the level of demand for graduates' qualifications in the labour market, h) the quality of support services, such as administration, libraries and student care, i) the implementation of an annual review and audit of the quality assurance system of the UGP through the cooperation of the Internal Evaluation Group (IEG) with the Quality Assurance Unit (QAU) of the Institution.

Relevant documentation

- Revised Quality Assurance Policy of the Institution
- Quality Assurance Policy of the academic unit
- Quality target setting of the Institution and the academic unit (utilising the S.M.A.R.T. methodology)

Study Programme Compliance

I. Findings

The UoWM has established an appropriate quality assurance policy that fully satisfies relevant requirements. The KPIs are regularly updated. The department follows the guidelines of the institutional policy. The MODIP monitors and enforces quality assurance. The department meticulously self-assesses its USP annually, and the learning resources and support services are equally well monitored.

The department has active researchers, and this will positively affect the education of undergraduate students, for example, by motivating bright students or writing scientific articles together. At present, there is an official process for recording the annual activities of the academic staff supervised by MODIP. However, EEAP did not find faculty annual performance reports used for monitoring purposes by the Head of the Department or other university authorities.

II. Analysis

Overall, the undergraduate program meets international standards. EEAP met with several students who enthusiastically indicated that they were very satisfied with the program and their education. Moreover, the students have expressed high satisfaction with the academic staff, administrative staff, student welfare services, and the school library.

The EEAP comments on the department for its rigorous monitoring process and urges it to continue with these sound practices.

III. Conclusions

The quality assurance policy is in place both in the department and the institution and overseen by the MODIP for proper and regular implementation. The program conforms very well to internationally established standards for mathematical training. In addition, the department takes appropriate action to improve whenever the need arises. Thus, the USP fully complies with Principle 2.

Panel Judgement

Principle 2: Quality assurance policy of the Institution and the academic unit	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None.

Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes

Institutions should design the new undergraduate programmes following a defined written process, which will involve the participants, information sources and the approval committees for the programme. The objectives, the expected learning outcomes, the intended professional qualifications and the ways to achieve them are set out in the programme design. The above details, as well as information on the programme's structure, are published in the Student Guide.

The Institutions develop their new undergraduate study programmes, following a well-defined procedure. The academic profile, the identity and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the European and National Qualifications Framework for Higher Education are described at this stage. An important new element in the structure of the programmes is the introduction of courses for the acquisition of digital skills. The above components should be taken into consideration and constitute the subject of the programme design, which, among other things, should include: elements of the Institution's strategy, labour market data and employment prospects of graduates, smooth progression of students throughout the stages of the programme, the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS), the option of providing work experience to the students, the linking of teaching and research, the international experience in study programmes of similar disciplines, the relevant regulatory framework, and the official procedure for the approval of the programme 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 Quality Assurance Unit (QAU).

Relevant documentation

- Senate decision for the establishment of the UGP
- Curriculum structure: courses, course categories (including courses for the acquisition of digital skills), ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities.
- Labour market data regarding the employment of graduates, international experience in a related scientific field.
- Student Guide
- Course outlines
- Teaching staff (list of areas of specialisation, its relation to the courses taught, employment relationship)
- QAU minutes for the internal evaluation of the new study programme and its compliance with the Standards

Study Programme Compliance

I. Findings

The Department of Mathematics was established in 2019 according to Law 4610/07.05.2019, concerning the Synergies between Universities and Technological Educational Institutions (Government Gazette No. 4610/07.05.2019, issue 70).

The Department of Mathematics is located in Kastoria and is part of the Faculty of Sciences. It accepted its first students in the academic year 2019-2020. The Department leads to a Bachelor's degree in Mathematics (without specializations and directions) and, according to the National Qualifications Framework, is defined at Level 6 (equivalent to the Bachelor's Degree).

The Study Guide (Οδηγός Σπουδών) is available in Greek and English. It contains information on the UoWM, the Department of Mathematics, the USP, and Student Care. Moreover, it describes USP courses and the recommended program of study, as well as information on the optional practical training, the undergraduate Thesis, the Certificate of computer language, and the student evaluations.

The USP offers optional practical training to its students. The opportunity was first introduced during the 2022-23 academic year and was chosen by 6 USP students who actively engaged in this option.

II. Analysis

As specified in the documentation reviewed by the EEAP, the design of the existing program is based on the following considerations: a) reviewing other established undergraduate programs, especially in Greece, universities that are exemplary and have a significant tradition in Mathematics b) following research developments and future trends in Mathematics, while taking into account the social and economic conditions and challenges within the Greek context and, d) the institutional and organizational/structural challenges within the higher education system.

The academic character of the Department of Mathematics at the UoWM focuses on teaching mathematics, cultivating mathematical thinking, and developing basic research in Algebra, Analysis, Numerical Analysis, Geometry, Statistics, and Operations Research.

The mission of the Department of Mathematics is, among other things, to train mathematicians of high quality and scientific training, capable of working at all levels of education, as well as in a variety of other private and public professions. In addition, the department prepares its graduates in the new areas of the science and profession of mathematics by keeping abreast of international developments. Also, to the extent possible, the mission of the Department of Mathematics is to play an active role in the local community.

The Study Guide is complete.

III. Conclusions

Considering that the program is only running for five academic years, EEAP believes that the results are satisfactory. The teaching certificate is an asset for USP graduates.

Panel Judgement

Principle 3: Design, approval and monitoring of the quality of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

EEAP suggests that USP doubles its efforts to increase the number of students participating in the practical training.

Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students

The academic unit should ensure that the new undergraduate programmes are delivered in a way that encourages students to take an active role in creating the learning process. The assessment methods should reflect this approach.

In the implementation of student-centered learning and teaching, the academic unit:

- ✓ *respects and attends to the diversity of students and their needs, enabling 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 application of pedagogical methods aiming at improvement*
- ✓ *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys*
- ✓ *reinforces 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 students' complaints*

Relevant documentation

- *Questionnaires for assessment by the students*
- *Regulation for dealing with students' complaints and appeals*
- *Regulation for the function of the academic advisor*
- *Reference to the planned teaching modes and assessment methods*

Study Programme Compliance

I. Findings

The USP program aims to educate students effectively using various and diverse learning methods. Students are encouraged to develop individual skills through study and guidance from their professors. The optional practical training and the undergraduate Thesis offer hands-on experiences. The USP fosters collaboration among students and professors, who are described as qualified and approachable.

There is a Study Advisor per student who monitors the student's progress throughout the studies.

The UoWM has a Career Office, a Student Advocate's Office, and a Student Support Unit for Vulnerable Groups.

The evaluation criteria and methods for students are published in advance in the Course Outlines, the Study Guide, and the course's "e-class" webpage. Results are posted on notice boards or e-class, and instructors are available to discuss their course matters with the students.

The USP collects student satisfaction surveys to measure teaching effectiveness. The evaluation questionnaires for undergraduate courses are provided in an electronic format. The MODIP processes these anonymous surveys and analyses the data to improve teaching quality. Annual surveys gather student feedback on various program aspects, including teaching and support. The results of the USP course evaluations are not available to the public.

The USP has formal mechanisms for handling student complaints and providing guidance through the Study

Advisors. Students can submit appeals through a formal process, beginning with immediate resolution attempts and escalating to written complaints to the department general assembly, if needed.

The good professional relationship between students and professors and it can be attributed to the relatively large faculty-to-student ratio.

Scholarships are awarded to excellent students.

The student ratio that participates in the internal evaluation questionnaire is satisfactory.

The course “Teaching Mathematics” offers teaching experience in a school classroom.

II. Analysis

The USP aims to deliver an impactful educational experience for its students. The optional practical training and the undergraduate thesis provide valuable hands-on opportunities that are beneficial in the job market.

The students are well informed about the services offered by the UoWM’s Career Office, Student Advocate’s Office, and Student Support Unit for Vulnerable Groups.

The course evaluation process is transparent and follows the norm found in other Greek universities.

III. Conclusions

The USP has several strengths, including diverse learning methods, optional hands-on experiences, and transparent course evaluation processes. Thus, it fully satisfies Principle 4.

Panel Judgement

Principle 4: Student-centred approach in learning, teaching and assessment of students	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The USP should increase efforts to enable students to see how their feedback is utilized in student evaluations and to make these results publicly accessible.

Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes

Academic units should develop and apply published regulations addressing all aspects and phases of studies of the programme (admission, progression, recognition and degree award).

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

- ✓ *the registration procedure of the admitted students and the necessary documents - according to the law - and the support of the newly admitted students*
- ✓ *student rights and obligations, and monitoring of student progression*
- ✓ *internship issues, granting of scholarships*
- ✓ *the procedures and terms for writing the thesis (diploma or degree)*
- ✓ *the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and assurance of the progress of students in their studies*

as well as

- ✓ *the terms and conditions for enhancing student mobility*

Appropriate recognition procedures rely on relevant academic practice for recognition of credits among various European academic departments and Institutions in line with the principles of the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region. Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes, and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

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

Relevant documentation

- *Internal regulation for the operation of the new study programme*
- *Regulation of studies, internship, mobility and student assignments*
- *Printed Diploma Supplement*

Certificate from the President of the academic unit that the diploma supplement is awarded to all graduates without exception together with the degree or the certificate of completion of studies

Study Programme Compliance

I. Findings

The Greek Ministry of Education regulates student admissions in HEI. The Ministry recently implemented a minimum entrance grade, which limits access to university education for high school graduates who do not meet the qualification criteria. This policy has affected many departments in different universities in Greece, resulting in a decrease in the expected number of first-year students. However, this minimum entrance grade

improves graduation rates.

The Study Guide includes instructions on several processes and services and is available through the Department of Mathematics website. The department and the university have a well-defined student progression monitoring process.

Student mobility is encouraged via the Erasmus+ project. Nevertheless, it has not been used so far. The optional practical training is very helpful to the students.

The ECTS system is applied across the curriculum for student recognition and certification. The workload of the courses is adjusted to the ECTS.

The Diploma supplement is awarded to all students and is available in both Greek and English.

II. Analysis

The PSP should keep the minimum entrance grade as is. Higher minimum entrance grades may decrease USP student enrolment and its effect on graduation rates would be small. Thus, such a change would negatively affect the program.

The EEAP noted that although the students are well informed about the Erasmus+ exchange program, it has not been utilized so far. This limits students' academic and professional development, as well as cultural exchange. In addition, only a small number of universities have been scientifically linked.

III. Conclusions

The EEAP found that the USP fully complies with Principle 5.

Panel Judgement

Principle 5: Student admission, progression, recognition of academic qualifications, and award of degrees and certificates of competence of the new study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- The PSP should continue to encourage students to take advantage of the Erasmus+ mobility program despite the expenses involved.

- The department should increase efforts to enhance scientific connections with established universities aboard.

Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes

Institutions should assure themselves of the competence, the level of knowledge and skills of the teaching staff of the academic units, 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, the appropriate staff-student ratio, the suitable categories of staff, the appropriate subject areas and specialisations, 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 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 members (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

Relevant documentation

- *Procedures and criteria for teaching staff recruitment*
- *Regulations or employment contracts, and obligations of the teaching staff*
- *Policy for staff recruitment, support and development*
- *Performance of the teaching staff in scientific-research and teaching work, also based on internationally recognised systems of scientific evaluation (e.g., Google Scholar, Scopus, etc.)*

Study Programme Compliance

I. Findings

The department has a relatively low faculty number, supported by administrative and teaching staff. There are also two more faculty positions available for the near future. Most of the faculty has experience from other Greek universities and have PhDs from abroad. All faculty can attend one funded conference annually paid for by the department. Typical annual research output is about 85 journal articles and 45 conference proceedings in total, with formal preset quality requirements as Q1, Q2, and Q3 category journals. The teaching load is typically two courses per semester, with some variation depending on other allocated tasks. All faculty have offices and the technical equipment (e.g., computers with dedicated software) they need. Teaching and administrative staff mobility is ensured in several ways. Faculty members are eligible to participate in Erasmus+ with institutions, organizations, and businesses in eligible European countries. There are also collaborations with universities abroad, which provide faculty with opportunities for sharing teaching and research experiences.

II. Analysis

The EEAP found that the faculty has relevant experience and expertise to provide teaching in content and delivery format (e.g., incorporating student engagement and mixed assessment methods). Due to the small student number in the USP, there is a collegial relationship between students and teaching and administrative staff, with the interviewed students viewing this accessibility as a key program differentiator. The EEAP noted that the teaching faculty showed awareness of the lower graduating numbers and has explored various ways to improve it. There is potential to increase the number of faculty, so it will be important for the USP that these new staff members can cover relevant electives with their expertise to ensure that these retain a high teaching quality.

Many of the electives are taught by staff from other departments, and there are no immediate plans to change this. For the USP, this has the advantage of providing greater options despite being a small department. In terms of linking teaching with research, the EEAP found that the more personal approach to teaching due to smaller class sizes in courses also supports the inclusion of ongoing research in the classroom.

III. Conclusions

The EEAP found that the USP is fully compliant with Principle 6.

Panel Judgement

Principle 6: Ensuring the competence and high quality of the teaching staff of the new undergraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None

Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes

Institutions should have adequate funding to meet the needs for the operation of the academic unit and the new study programme as well as the means to cover all their teaching and learning needs. 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, boarding, career and social policy services, etc.).

Institutions and their academic units must have sufficient resources, on a planned and long-term basis, to support learning and academic activity in general, in order to offer students the best possible level of studies. The above means include facilities such as, the necessary general and specific libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, information 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. Students should be informed about 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.

Relevant documentation

- *Detailed description of the infrastructure and services made available by the Institution to the academic unit to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding specific commitment of the Institution to financially cover these infrastructure-services from state or other resources*
- *Administrative support staff of the new undergraduate programme (job descriptions, qualifications and responsibilities)*
- *Informative / promotional material given to students with reference to the available services*

Study Programme Compliance

I. Findings

The EEAP found that the learning resources and support services available to the students are provided by the department or by the university. They consist of three categories: physical infrastructure facilities, academic and administrative services, and social and other advisory services. Lectures, seminar rooms, and facilities are available and manageable by the small size of the USP student body. The university library provides access to various databases, as well as electronic access to publications, books, and academic journals. Relevant software such as MATLAB, LaTeX, and Microsoft 360 are available to the students. Career affairs and Erasmus+ opportunities exist, with students interviewed by the EEAP being aware of them. There is also an emphasis on support for student well-being.

II. Analysis

The EEAP found that measures are in place to ensure sufficient learning resources and the availability of student support. The computer lab is well-equipped, but it may be limiting if student numbers grow in the future. This is, in practice, managed by placing the seminars on a back-to-back timetable or by students sharing computers as needed. As such, the resources are adjustable and can cater to small classes and larger student groups, which

provides the USP flexibility in the courses offered and their delivery format.

Students have access to relevant journals and databases. Moreover, there are student resources, including social support, readily available and sufficient. This is aligned with the positive student feedback on library surveys on the facilities. The EEAP noted that the facilities were clean and well-maintained. It was mentioned that this is due in part to the department and university's efforts to instil a sense of pride and care among the students for the facilities.

III. Conclusions

Overall, the EEAP finds that the existing resources and processes are sufficient to successfully deliver the USP to the current student size.

Panel Judgement

Principle 7: Learning resources and student support of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None

Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes

The Institutions and their academic units bear full responsibility for collecting, analysing and using information, aimed at the efficient management of undergraduate programmes of study and related activities, in an integrated, effective and easily accessible way.

Effective procedures for collecting and analysing information on the operation of Institutions, academic units and study programmes feed data into the internal quality assurance system. The following data is of interest: key performance indicators for the student body profile, student progression, success and drop-out rates, student satisfaction with the programme, availability of learning resources and student support. The completion of the fields of National Information System for Quality Assurance in Higher Education (NISQA) should be correct and complete with the exception of the fields that concern graduates in which a null value is registered.

Relevant documentation

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

Study Programme Compliance

I. Findings

The UoWM MODIP is responsible for all needed data collection and information processing and operates in accordance with international practices, particularly those of the European Higher Education Area, as well as with the principles and guidelines of the HAHE. The UoWM Department of Mathematics actively and consistently participates in this information management plan via the OMEA. The OMEA communicates and collaborates with the institution's MODIP to ensure that the quality assurance policy of the institution and the department programs are aligned.

The USP has developed a good information management system with all procedures for the collection and processing of data compatible. From enrolment to graduation, data for each student is collected to support the educational process. At the end of each semester, MODIP invites students and teaching staff to log into the MODIP electronic environment and respond to specially designed questionnaires regarding the evaluation of students, teaching staff, teaching work, administrative services, and other facilities. Student data such as demographics, exam performance, and attendance are collected automatically and processed to create appropriate reports for administrative and academic use within the UoWM.

The USP has been suitable for established KPIs, learning resources are well applied, and student support is available, both formally and informally. Student progression, success, dropout rates, and student satisfaction rates are monitored regularly, and relevant detailed data are provided to the assessing panel and reported to HAHE. Although it was stated that there is an exit interview for the UoWM graduates, such data are not available.

II. Analysis

Modules are reviewed regularly through meetings of the department teaching staff, the Head of the Department of Mathematics, the OMEA, and the MODIP, but it is not apparent whether information on module updates is communicated clearly to the students. Student evaluations of courses take place in a clear way using electronic questionnaires with well-formulated questions, and the completion rates are sufficient. One weakness is reporting the assessment data from USP graduates who have left the program.

III. Conclusions

The USP has an excellent information management system, and thus, it fully complies with Principle 8.

Panel Judgement

Principle 8: Collection, analysis and use of information for the organisation and operation of new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The USP should collect and report data related to the exit interview from its graduates.

Principle 9: Public Information Concerning the New Undergraduate Programmes

Institutions and academic units should publish information about their teaching and academic activities in a direct and readily accessible way. The relevant information should be up-to-date, clear and objective.

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 new undergraduate programmes they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students. Information is also provided, to the extent possible, on graduate employment perspectives.

Relevant documentation

- *Dedicated segment on the website of the department for the promotion of the new study programme*
- *Bilingual version of the website of the academic unit with complete, clear and objective information*
- *Provision for website maintenance and updating*

Study Programme Compliance

I. Findings

The Department of Mathematics website is available in Greek and English. Both websites are user-friendly and easy to navigate. The USP is featured on department websites as a menu option. The Greek version of the department website contains a menu regarding the department and its quality assurance, its personnel, the USP, the students, and the graduates, information on research within the department, colloquia and its speakers, doctoral studies, and contact information for the public. The department website also hosts announcements in Greek related to the department and its programs. The USP menu includes links to general information about the program, the Undergraduate Studies Regulation, the Study Guide, the Course Outlines, the program of study, which lists all courses offered per semester, courses offered from other UoWM departments applicable to the USP students, course timetable, information on the final exam timetable for the Spring 2024 semester, exam regulations, information on the optional practical training and the Thesis, information on placement exams, and information on the Certification of Computer Skills.

The English version of the department website provides significantly less information than its Greek counterpart, and the same applies to the USP menu. The department website's Greek and English versions include a link to a copy of the USP founding law (No.4610/07.05.2019), but the copy itself is in Greek. Information on doctoral studies, the USP graduates, and colloquia and its speakers only appear in the Greek version of the department website. The English version of the USP menu only includes information on the Study Guide, the Course Outlines, the program of study, the Thesis, and the Certification of Computer Skills.

The Study Guide and the department's permanent faculty CVs are found on the department website in Greek and English.

There are also links to social media department sites, such as Facebook and YouTube.

II. Analysis

The USP website is bilingual, with both Greek and English versions. The English version contains less information than the Greek version, thus hampering the department and the USP's exposure to non-Greek speakers in Greece and abroad. The English version of the department website and the USP menu seem incomplete and in progress. This affects potential Erasmus+ students who may be interested in the department's programs and potential collaborations with researchers from non-Greek speakers abroad.

III. Conclusions

The USP provides a bilingual website via a menu link from the department website, and some of the information is common to both websites. However, the English website contains less information than the Greek counterpart. Thus, the PSP does not fully satisfy Principle 8.

Panel Judgement

Principle 9: Public information concerning the new undergraduate programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

The department and the USP must provide the exact same information about the program on its website, both in Greek and English.

Principle 10: Periodic Internal Review of the New Study Programmes

Institutions and academic units should have in place an internal quality assurance system, for the audit and annual internal review of their new programmes, so as to achieve the objectives set for them, through monitoring and amendments, with a view to continuous improvement. Any actions taken in the above context, should be communicated to all parties concerned.

Regular monitoring, review and revision of the new 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: the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date; the changing needs of society; the students' workload, progression and completion; the effectiveness of the procedures for the assessment of students; the students' expectations, needs and satisfaction in relation to the programme; the learning environment, support services, and their fitness for purpose for the programme. 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.

Relevant documentation

- *Procedure for the re-evaluation, redefinition and updating of the curriculum*
- *Procedure for mitigating weaknesses and upgrading the structure of the UGP and the learning process*
- *Feedback processes on strategy implementation and quality targeting of the new UGP and relevant decision-making processes (students, external stakeholders)*
- *Results of the annual internal evaluation of the study programme by the QAU and the relevant minutes*

Study Programme Compliance

I. Findings

The USP self-assessment process occurs annually with the support of the MODIP. Quality assurance objectives for the USP are established on an annual basis, and the results of the USP self-assessment are shared within the academic unit. The USP's performance is assessed using students' course evaluations. The EEAP did not find any information on surveys from graduates and external stakeholders. Although the presentation by the Vice-Rector of Academic Affairs/President of MODIP stated that there is an exit interview for the students completing their programs, no supporting data was found.

After interviewing USP students, the EAAP discovered that informal meetings took place with department faculty, during which students were asked for their opinions on potential changes to the curriculum.

II. Analysis

The USP collects data, which it uses to improve. The students' evaluation surveys serve as an indirect assessment method for the PSP. The lack of satisfaction surveys from the graduates and the external stakeholders hampers the program assessment. Students, graduates, and other stakeholders do not appear to have been directly involved in the decision-making processes for curriculum improvements via a formal mechanism.

The number of students participating in the course evaluations is 40%, which is considered satisfactory (the KPI target is 50%). The student survey results showed that the PSP students

are somewhat satisfied with the PSP course objectives and the material covered (3.46/5.00, KPI target is 4.00/5.00). Here, the KPI target of 4.00/5.00 for student satisfaction seems low.

III. Conclusions

The USP is assessed predominantly through student surveys. However, it does not fully satisfy Principle 10 due to the lack of a feedback mechanism from its external stakeholders, the nonparticipation of its graduates in the surveys, and the absence of engagement of students, graduates, and external stakeholders in its improvements via a formal mechanism.

Panel Judgement

Principle 10: Periodic internal review of the new study programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- The USP must develop satisfaction surveys for the external stakeholders involved with the program and report surveys related to the graduates' exit interviews.
- The USP must increase its target KPI for student satisfaction to at least 4.5/5.00.
- The USP must increase efforts to improve the average in the student satisfaction rating.
- The USP may consider developing an Advisory Board of faculty, students, graduates, and external stakeholders to actively assist in program improvements.

Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes

The new undergraduate study programmes should regularly undergo evaluation by panels of external experts set by HAHE, aiming at accreditation. The results of the external evaluation and accreditation are used for the continuous improvement of the Institutions, academic units and study programmes. The term of validity of the accreditation is determined by HAHE.

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure and implemented by a panel of independent experts. HAHE grants accreditation of programmes, based on the Reports submitted by the panels, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with 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.

Relevant documentation

- *Progress report on the results from the utilisation of the recommendations of the external evaluation of the Institution and of the IQAS Accreditation Report.*

Study Programme Compliance

I. Findings

The USP has not previously undergone an external evaluation for accreditation. However, it does provide progress reports on parts of the institution's accreditations, which took place on 29/2/2016 and 5/3/2016 and on 14/12/2020 and 19/12/2020 and relate to the USP.

II. Analysis

The current evaluation is the PSP's first external accreditation review. Some recommendations from the 2016 and 2020 reviews also apply to the institution's undergraduate and postgraduate programs. Since then, several changes have been implemented to the USP for its improvement following the institution's reviews. The EEAP found that the USP faculty and supporting staff were very helpful in answering the panel's questions during the current review. Moreover, they showed that they understand the importance of the accreditation process and the panel's recommendations. The USP follows a commonly used procedure for utilizing the outcomes of the external evaluation. These outcomes are shared with all members of the UoWM Department of Mathematics (teaching staff, students, and administrative staff) and the MODIP.

III. Conclusions

An external committee has not previously evaluated the PSP for accreditation purposes. However, the institution has implemented several recommendations based on the 2016 and 2020 external reviews, which affect the USP. The EEAP found that the USP is in full compliance with Principle 11.

Panel Judgement

Principle 11: Regular external evaluation and accreditation of the new undergraduate programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None.

Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones

Institutions and academic units apply procedures for the transition from previously existing undergraduate study programmes to new ones, in order to ensure compliance with the requirements of the Standards.

Applies in cases where the department implements, in addition to the new UGPs, any pre-existing UGPs from departments of former Technological Educational Institutions (TEI) or from departments that were merged / renamed / abolished.

Institutions should implement procedures for the transition from former UGPs to new ones, in order to ensure their compliance with the requirements of the Standards. More specifically, the institution and the academic unit must have a) the necessary learning resources, b) appropriate teaching staff, c) structured curriculum (courses, ECTS, learning outcomes), d) study regulations, award of diploma and diploma supplement, and e) system of data collection and use, with particular reference to the data of the graduates of the pre-existing UGP. In this context, the Institutions and the academic units prepare a plan for the foreseen transition period of the existing UGP until its completion, the costs caused to the Institution by its operation as well as possible measures and proposals for its smooth delivery and termination. This planning includes data on the transition and subsequent progression of students in the respective new UGP of the academic unit, as well as the specific graduation forecast for students enrolled under the previous status.

Relevant documentation

- *The planning of the Institution for the foreseen transition period, the operating costs and the specific measures or proposals for the smooth implementation and completion of the programme*
- *The study regulations, template for the degree and the diploma supplement*
- *Name list of teaching staff, status, subject and the course they teach / examine*
- *Report of Quality Assurance Unit (QAU) on the progress of the transition and the degree of completion of the programme. In the case of UGP of a former Technological Educational Institution (TEI), the report must include a specific reference to how the internship was implemented*

Study Programme Compliance

I. Findings

Not applicable.

II. Analysis

Not applicable.

III. Conclusions

Not applicable.

Panel Judgement

Principle 12: Monitoring the transition from previous undergraduate study programmes to the new ones	
Fully compliant	
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Not applicable.

PART C: CONCLUSIONS

I. Features of Good Practice

- The USP curriculum provides courses that are on par with Mathematics curricula offered at other Greek universities and abroad.
- The USP is well-designed and has defined aims and objectives. It is clearly structured and developed to cover all needed areas in Mathematics, equipping graduates with applied skills to meet the needs of a developing society.
- The USP's current students, graduates, teaching staff, and stakeholders have positive experiences with the USP.
- The Department of Mathematics is situated in a location that provides housing at substantially lower rates than other areas in Greece. This affordable housing option is highly advantageous for USP students.
- The faculty-to-student ratio is significantly higher than that found in similar mathematics undergraduate programs in metropolitan Greece, allowing the university to offer a more personalized education to its students.

II. Areas of Weakness

- The USP number of incoming students is small.
- The USP graduation rate is low.
- The number of permanent faculty members in the Department of Mathematics is small.
- The number of students participating in the optional practical training is small.
- There are no satisfaction surveys for the external stakeholders involved with the program.
- There is no data for graduates' surveys (i.e., exit interviews).
- There is no formal feedback mechanism for the USP improvements from the USP students, graduates, and external stakeholders.
- The KPI for student satisfaction, currently at 4.00/5.00, is low
- The average student satisfaction rating needs to be improved.
- The English version of the department and the program websites contain less information than their Greek counterparts.
- There is no evidence that USP students participate in the Erasmus+ program.
- Only a small number of universities have been scientifically linked with the program.

III. Recommendations for Follow-up Actions

- The USP needs to make efforts to attract and retain more incoming students to the program.
- The USP must improve the student graduating rate.
- The USP must develop satisfaction surveys for the external stakeholders involved with the program and report surveys related to the graduates' exit interviews.
- The department and the USP must provide the exact same information about the program in Greek and English on their websites.
- The USP must increase its target KPI for student satisfaction to at least 4.5/5.00 and improve the average in the student satisfaction rating.
- The USP may consider developing an Advisory Board of faculty, students, graduates, and external stakeholders to actively assist in program improvements.
- The PSP should continue encouraging students to use the Erasmus+ mobility program despite the expenses involved.
- The department should enhance scientific connections with established universities abroad.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 2, 3, 4, 5, 6, 7, 8, and 11.**

The Principles where substantial compliance has been achieved are: **9 and 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	X
Substantially compliant	
Partially compliant	
Non-compliant	

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

- 1. Prof. Nikolaos Dimakis (Chair)**
University of Texas Rio Grande Valley (UTRGV), Edinburg, USA
- 2. Prof. Nikos Stylianopoulos**
University of Cyprus, Nicosia, Cyprus
- 3. Prof. Jannis Angelis**
KTH Royal Institute of Technology, Stockholm, Sweden
- 4. Mr. Stylianos Sfondylis, Undergraduate Student**
Aristotle University of Thessaloniki, Thessaloniki, Greece