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Accreditation Report
for the New Undergraduate Study Programme in operation
of:

Physics

Institution: University of Thessaly

Date: 1 October 2022

Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation of **Physics** of the **University of Thessaly** for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new undergraduate study programme in operation of **Physics** of the **University of Thessaly** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Prof. Dr. Eng. Vassilis Pontikis (Chair)**
Université Paris-Saclay, Commissariat à l’Energie Atomique et aux Energies Alternatives, Gif-sur-Yvette, France
- 2. Dr. Demosthenes Kazanas**
NASA Goddard Space Flight Centre, Greenbelt, Maryland, United States of America
- 3. Dr. Spyros Manolopoulos**
Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, United Kingdom
- 4. Prof. Sokrates Pantelides**
Vanderbilt University, Nashville, Tennessee, United States of America
- 5. Mr Charalampos Papapanagis**, student of Chemistry
National and Kapodistrian University of Athens, Athens, Greece

II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) conducted, during the period September 26-October 1, 2022, the accreditation evaluation of the Undergraduate Program (UGP) of Physics of the University of Thessaly (UTH) based at Lamia.

By HAHE and EEAP members choice the external evaluation and the site visit took place via electronic means (Zoom teleconferencing).

On Monday, September 12, 2022, preceding the review, members of the EEAP attended a Zoom teleconference briefing by HAHE's General Director Dr. Christina Besta, who outlined and explained the procedures and rationale for the accreditation. Dr. Besta's presentation has been sent to the EEAP members.

The EEAP received in advance from HAHE the following documentation and supporting material related to the Undergraduate Program in Physics:

1. Guidelines for the EEAP (P12Ba).
2. The Mapping Grid Assessment Guide (P13B).
3. Tables of the scores of the UGP regarding the quality indexes for the years 2019 – 2021.
4. The description Standards for New UGP in operation (P1B).
5. The guidelines of accreditation (ODIGOS PISTOPOIISIS) in complement of item 1.
6. Information about the European Qualifications Framework.
7. The template for the "New Undergraduate Study Programme in operation Accreditation Report" (P14B).

On Monday, September 26, 2022, the EEAP had first a private 2-hours meeting to discuss the review process, allocate tasks, and identify possible issues to be addressed.

Then, EEAP members met with the Vice-rector, the President of MODIP and the head of the Department of physics. The last presented in a short overview the history, academic profile, current status, strengths and possible areas of concern of the UGP. Slides of this presentation have been sent to the EEAP members.

The next meeting with OMEA and MODIP representatives lasted about two hours and focused on the matters of quality standards and student assignments, theses, exam and examination material.

The EEAP has learned from the above teleconferences that, since the year 2020, the UGP is under a regulatory constraint forbidding student mobility from Lamia to other national academic units in physics except the one operating in Kavalla (Declarations of the Vice-Rector and of the president of MODIP). EEAP has received no explanations for the reasons that instigated this discriminative constraint by the competent authorities. Moreover, it was put to EEAP's attention that candidates likely to apply for admission in the UGP misinterpret this constraint as an acknowledgement by the state that the UGP is not equivalent to other similar units in Greece, thus choosing instead to apply to other Physics Departments. This deprives the unit of a potential source of students and is detrimental to the moral of its staff and of existing students, matters of major concern for the academic unit and the institution. The EEAP is convinced that after three years of successful operation of the UGP and the present overall

positive evaluation for the quality of its undergraduate program, this probatory constraint is unnecessary and must be removed.

The EEAP has decided to merge the short debriefing in conclusion of the day with that scheduled on Tuesday.

On Tuesday, September 27, 2022 the EEAP met separately teaching staff members and students. The objectives of these meetings were to discuss with professors aspects of teaching, research, professional opportunities and workload and with students to seek the degree of satisfaction from their studying experience and issues relating with student life and welfare.

The EEAP had the opportunity to participate to an online tour of facilities (buildings, classrooms, and other facilities) commented on by administrative and teaching staff members. The review of student assignments, exam papers and examination material has been made thanks to the documents that were made available by the OMEA. It should be mentioned that members of the EEAP had also the opportunity to login the e-class site in order to assess its structure and suitability for the teaching needs.

The day concluded with a meeting with employers/social partners of the academic unit and the EEAP's debriefing.

On Wednesday, September 28, 2022 a meeting with OMEA and MODIP representatives has permitted to discuss points and findings that needed further clarification. The review closure consisted in a short presentation by the EEAP chair of key findings in presence of the Rector, the Vice-Rector, OMEA and MODIP members.

The report of the EEAP was prepared in the period September 28-October 1, 2022. The final document was submitted to HAHE on Monday, October 3, 2022.

The schedule of the tele-review was well organized albeit very dense. As a result, most of the meetings' duration exceeded the allocated time. Nevertheless, the EEAP came away with a thorough picture of the University, School and Programme visions and of the efforts made for the education of the undergraduate students.

The overall conclusion of the EEAP is that the quality of the UGP of the UTh is in accordance with international standards for similar programs and Universities.

The EEAP noted the dedication and commitment of the teaching staff and administration of the UGP and UTh to develop rigorous procedures for monitoring the assurance quality, and, in general, the effectiveness of the program.

The last word is about the efficiency, transparency, and valuable help of the HAHE staff that the EEAP warmly thanks for their assistance and availability during the review.

III. New Undergraduate Study Programme in operation Profile

The Department of Physics of the University of Thessaly was established in 2019 increasing to seven (7) the number of similar schools/departments existing in Greece. Along with the newly established Mathematics department, it complements the School of Sciences of the University of Thessaly. The department covers all the basic disciplines in Physics and belongs to the fifth (5) class of the UNESCO classification (ISCED 2013) labelled “Natural Sciences, Mathematics and Statistics”, whereas its program covers exhaustively the subcategory “0533 Physics” in this classification.

The teaching staff is composed by 13 full time teachers (DEP members: 6 Professors, 3 Associate Professors, 4 Assistant Professors; two faculty have retired). Ten (10) lecturers under contract add to the teaching staff supplemented by one (1) associate professor from the department of Computer Science and one (1) lecturer from the department of Mathematics. The department also employs 3 administrative personnel.

Students enrol for a minimum of 8 semesters (4 years) and are required to successfully obtain 240 European Credit Transfer and Accumulations System (ECTS) units.

In the two first years 2019 and 2020, 112 and 111 new students enrolled respectively in the Physics undergraduate programme. However, the number decreased to 32 (2021-2022) to reach 51 this academic year.

The general structure of the undergraduate degree in Physics is as follows:

Semesters 1-6: Students must successfully complete 30 compulsory courses (including 5 laboratory courses), which includes fundamental courses in Physics and Mathematics. The total number of ECTS in semesters 1-6 is 180.

Semesters 7-8: Students must choose one among four possible orientations and successfully complete 4 compulsory courses and 6 elective courses (60 ECTS).

The diploma thesis (12 ECTS) is optional.

An optional 3-month practical training (15 ECTS) at various entities within the Greek public and private sectors is offered every year to students in the fourth year of studies.

Upon completion of the study program, students are awarded a Bachelor’s degree (Πτυχίο Φυσικής) consistent with level 6 of the European Qualifications Network.

The department counts 25 PhD and 9 postdoctoral students.

The department’s expectation relating to the professional insertion of future graduates is that these would be offered several employment prospects in the areas of secondary education, research, telecommunications, electronics, computational science, materials science, environmental activities, and meteorology.

Funding amounts 12.000€/year augmented by about 7000-9000 € for appointing extra teaching personnel. External funding of research is about 0.2M € for over the last three academic years.

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 study program of the department covers the basic physics curriculum of the typical European Union or Greek university physics department. It is formulated in accordance with the ECTS regulations and metrics, with graduation requiring 240 ECTS units as set by the said standard. With their completion of the department curriculum the students have been instructed and have their knowledge tested in the basic principles of physics and have acquired hands on experience in the corresponding laboratory courses. A noteworthy element of the curriculum is the four specialized study orientations (Κατευθύνσεις) and internships in the fourth year of study.

The graduates will have the necessary experimental knowledge that allows them to seek employment in (a) research, in further pursuing a career in physics, (b) in secondary education and (c) in any field of the local economy that requires knowledge of their field of study.

- b. The academic development strategy of the department aligns with that of the broader strategy of the University of Thessaly. The implementation of this strategy is solidly linked to a SWOT analysis of the virtues and problematic issues of the university in general and the department in particular. This study includes Political, Economic, Social and Technical components as detailed in the relevant documents (B3, B4). Of the problematic issues an obvious and significant one is the small number of teaching personnel given the admitted number of students.
- c. There is also a detailed documentation of the feasibility of the operation of the department and the study programme. This is based on: (a) The perceived needs of the economy in people with scientific knowledge and experience in the fundamental aspects of physics and application technologies; (b) the study of current scientific developments in a variety of very diverse fields that extend from the most applied (data analysis, informatics) to the most abstract (high energy physics, gravitational waves); (c) the establishment of laboratories for the study of novel materials and (d) the potential studies of across diverse fields of study (physics-economics, teaching methods).
- d. The above are supplemented by a detailed four-year business plan which outlines the goals of the department in terms of personnel (both academic, technical, and administrative), infrastructure, expected future number of students, budgetary projections and a host of other activities (e.g., collaboration with national and international organizations / cf. B5).

Since the details of the program of study are discussed in other principles of this report, we do mention here that they are in compliance with the ECTS system, as required. There is also ample documentation pertaining to statistics of student performance and their feedback on course structure through their end-of-semester evaluations. As the department has not yet produced any graduates there are no statistics related to their post-graduation careers. Transfers of students from or to the UT department of physics do not appear in any of the statistical tables.

- e. The number of admitted students of the first two years was above the number of the original proposal by the UT (80), but it appears to have now settled to 112. However,

the next two years the number was substantially smaller (32 and 51) likely because of the introduction of a minimum grade for acceptance at the Panhellenic Examinations.

- g.** The department offers also graduate programs and postgraduate research positions, including an inter-departmental MSc program on Economics/Physics. The number of Master students are 20, the number PhD students stands now at 25 while the number of postdoctoral researchers is currently 9.

II. Analysis

The department is integrated within the broader “raison d’être” (academic development, sustainability, and feasibility plans) of the University of Thessaly and it has made significant effort to harmonize with this integration. This is apparent by the efforts of the faculty to get involved in (a) cutting edge technology and scientific research, so much on their own as well as through local (intra- and inter-departmental) collaborations (UT in Volos); (b) nurturing international collaborations (CERN); (c) enlist the technology of the nearby installations of the national communication system for research goals. Also, of the desire to see its graduates contribute to the broader economy both local and national, an issue that it has been one of the fundamental tenets in the creation of the new department.

(e) In addition to the physics fundamentals (classical mechanics, electricity and magnetism, optics, quantum mechanics, thermodynamics and statistical physics), the program covers specialized areas (elementary particles, nuclear, condensed matter, astrophysics, plasma physics, fluid mechanics, electronics) and in the fourth year, students choose one of four orientations (κατευθύνσεις) that are based on groupings of these academic specializations, with emphasis again on the corresponding fundamentals. Optional courses on “applied physics” that can lead to employment-related skills range from zero in one orientation, very few in another, and many, but diverse, in the other two.

(g) Defining research-active faculty as those who published more than one paper per year in the last few years, there are only four research-active faculty (the total citations of the department are skewed by one faculty member who has 1100 papers with the huge CERN collaboration, with ~60,000 citations; the rest of the faculty have ~4,000 citations; (source: Web of Science). The other three work in materials physics. The department lists 11 areas of physics as priorities and the strategic plan calls for a new hire in theoretical low-energy nuclear physics, one in theoretical physics, one in the synthesis of modern technological materials and one in electronics telecommunications. The first two would have limited impact on the objective of educating students for the marketplace while the other two would contribute to all objectives in research and education and in the postgraduate and doctoral programs.

III. Conclusions

While the department is getting good grades for effort and while one must shoot higher than one’s grasp, care must be taken that the department is not overrun by unreasonable enthusiasm, given the existing realities. Under this broader perspective of the department structure, there are several issues that immediately caught the eye of the panel. One is the number of electives available to the students at the fourth year of their studies. Another one is the large number of PhD candidates, most of which are in the educational field. While this may be consistent with the demands of the Greek marketplace (more qualifications provide

better chance for a teaching position), its imbalance with more conventional PhD projects makes a startling first impression. Furthermore, concerning the issue of PhD and post graduate researchers, it was rather surprising to find that they are not getting paid, even though, as the panel noted, there are faculty members who have attracted research funds of at least two hundred thousand euros.

(e) The four orientations of the study program offer excellent opportunities for students who intent to pursue a PhD in one of those areas (they would qualify for admission in the best U.S. universities without a Master's degree), but the vast majority of students who would prefer employment receive a heavy dose of fundamentals and have relatively limited opportunities to acquire broad interdisciplinary skills that would enable them to face ever-changing, software-driven, high-technology and biomedical marketplaces without first obtaining an MSc degree.

(g) The department needs to have a focused growth plan, aiming to hire high quality researchers, preferably in interdisciplinary areas, that can develop interdepartmental and inter-university collaborations and educate students at the undergraduate, postgraduate, and doctoral levels. These activities will make the department shine internationally as a research institution and nationally as an educator of students of multidisciplinary skills that can be innovators and entrepreneurs or employees in the Greek marketplace and benefit society.

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	
Substantially compliant	X
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	X
Substantially compliant	
Partially compliant	
Non-compliant	
g. Postgraduate studies	
Fully compliant	
Substantially compliant	X
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 panel recommends that the orientations be re-designed, to be driven by projected student needs. The department should give serious consideration to starting the orientation options in the third year, which currently offers a range of advanced courses in specialized areas. Paths for research-oriented, PhD-aiming students should definitely be provided, but diverse paths for the majority, market-aiming students can be constructed for well-defined areas, e.g., electronics and telecommunications, biomedical, energy and climate, computer modeling (virtually all industries are doing it now), with courses on machine learning and “innovation and entrepreneurship” being required for all. The latter should aim to inspire students to aspire to be leaders in innovation and business ventures, not merely employees.
- Internships to existing companies and start-ups across Greece should be sought to complement the orientations (for example, Theracell Advanced Biotechnology in Kifissia, Science and Technology Park of Crete in Iraklion, Thessaloniki Technology Park in Themi, Thessaloniki Innovation & Technology Center in Thermaikos, Attica Technology Park “Lefkippos”, Joist Innovation Park in Larissa, Xanthi Tech Lab (one of many “Αμερικάνικες Γωνιές”).
- The panel is unanimous in its recommendation that projected new hires be in the following interdisciplinary experimental areas: materials physics, electronics/communications, and biomedical, with at least one having expertise in computer simulations and machine learning.

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 academic unit has adopted a Quality Assurance Policy, in full alignment with the Quality Assurance Policy of the Institution, which can be found on the Department website. It contains commitments to satisfying relevant quality requirements and promoting continuous improvement, through a series of methods. These include the evaluation of the courses and the teaching staff by the students, conducted through anonymous surveys once every semester; the revision of the undergraduate curriculum on an annual basis; and the recruitment of qualified new teaching staff, as well as graduate students and researchers.

Both the Institution and the academic unit have set specific, measurable, achievable, relevant and timely goals (S.M.A.R.T. methodology) regarding the new undergraduate programme, especially regarding teaching methods, research output and visibility, funding, as well as student satisfaction, performance and mobility. All evaluation processes are in general carried out by the IEG (OMEA) at the Department level, in collaboration with the QAU (ΜΟΔΙΠ) at the Institution level. It should be noted that student representatives have an active role as members of the aforementioned committees.

II. Analysis

The Department appears to have in place a variety of methods with respect to quality assurance. However, the Panel noticed that the specific goals and the progress towards their achievement (expressed in numerical indicators) were not routinely discussed by the responsible committees, as evidenced by the relevant meeting minutes.

Finally, it was brought to the Panel's attention by representatives of the students that the same questionnaire form is used for the evaluation survey in all Departments of the University, potentially overlooking some parameters related to the unique nature of each curriculum. This issue, combined with the potentially ineffective methods of communication addressed to the students, has resulted in consistently low percentages of student engagement and participation in the evaluation process every semester.

III. Conclusions

In the short time period of its operation, the Department has demonstrated a commitment to assuring the quality of the new undergraduate programme, as per HAHE guidelines, and has received necessary support from the Institution towards that goal. The application of these principles through specific actions is in need of better monitoring, and broader participation is required as far as students are concerned; nevertheless, the Panel concludes that the Department is fully compliant with Principle 2 of this Review.

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

- The QAU (ΜΟΔΙΠ) of the Institution and the IEG (ΟΜΕΑ) of the Department should set measurable goals within a specific timeframe, and thoroughly review the corresponding percentage metrics towards the achievement of each objective. This process should be duly documented in the context of their meetings, and the results of the actions undertaken could be shared on the Department website.
- The IEG (ΟΜΕΑ) should prioritize finding more efficient and meaningful ways of communication with the students, regarding the importance of completing the evaluation questionnaires.
- The QAU (ΜΟΔΙΠ) should consider the implementation of customized student questionnaires, tuned to the particular conditions and needs of each Department, rather than only one general form throughout the entire University.
- The Department should communicate its Quality Assurance Policy in a more prominent way, addressed to all relevant parties and especially the students. For example, a dedicated section could be incorporated in the welcoming ceremony for first-year students, including a specific reference to the implications of not conforming to the quality standards.

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 study program, its rationale and structure are articulated in the unit's proposal for accreditation [B1] and study guide [B11].

The program of the physics department has been designed to reflect the typical physics program at other Greek or established foreign universities. It is formulated in accordance with

the ECTS regulations and metrics that apparently represent the prevailing standard in Greece and the entire European Union. Graduation requires 240 ECTS units as required by the said standard. The goal of the curriculum is to introduce the students to the basic notions and nuances of the different, standard, branches of physical sciences (Mechanics, EM, QM, Thermodynamics etc.) and also provide instruction in the increasingly important aspect of computer programming and numerical analysis. The curriculum in the out year separates into four different directions (κατευθύνσεις) namely: Applied Physics – Electronics, Theoretical Physics – Astrophysics, Nuclear Physics – Elementary Particle Physics and Solid-State Physics. These provide more specialized instructions on the specific subjects with core courses and a broad selection of electives and the option to prepare an undergraduate thesis instead of an equivalent number of courses. The program includes, in addition, instruction in the mathematical tools (calculus, complex analysis, probability theory) necessary for the more in detail handling of the above subjects. Finally, the teaching activities are also supported by practical training in the corresponding laboratories. [B11].

The Student Guide is appropriate and concise but does not include all teaching and assessment methods (πρόοδοι) [B11].

The feasibility study defines the rationale of the new unit, its mission, the implementation and growth plan, SWOT analysis, environmental factors, sustainability analysis, the vision for the employability of the unit's graduates, the human resources and facilities for the support of the undergraduate study program [B4].

The students develop digital skills by studying 4 dedicated courses that include “Computer Programming 1 and 2” [B13], augmented by elective courses with appropriate content, e.g. neural networks, medical imaging etc. [B12] <https://www.phys.uth.gr/mathimata/>.

A policy is in place for the curriculum's revision on an annual basis [e-mail communication “Answers-principle10”], but no data has been provided for its implementation. The revision is expected to be carried out by the unit with the participation of student representatives under the auspices of MODIP [email communication “Answers-principle10”].

II. Analysis

The program of the physics department, as presented in the student guide, is consistent with those of the corresponding programs of most universities of Europe and the USA. Actually, some of the offered courses are sufficiently specialized to be considered subject matter of studies beyond the undergraduate level. The approval and quality monitoring of the program performed under the combined actions of OMEA and ΜΟΔΙΠ along with the evaluations of individual courses by the students. It has been observed that these evaluations have led, at least in one case, to a positive feedback resulting in improved metrics for a particular course.

The feasibility study for the new undergraduate program defines the related objectives, input and expected output. The students can develop sufficient digital skills. A policy is in place for the curriculum's revision on a regular basis.

III. Conclusions

The nascent Physics Department of the UT has developed a course program along the lines of the programs of the more established physics departments at universities in Greece and the EU. Its goals of infusing its students with not only the fundamental notions of Physics but also with sufficient theoretical and practical/technical development are eminently achievable should this program be followed as planned. The specialized directions of the fourth year are drawn based on conventional physics and driven by the research activities of the faculty.

Panel Judgement

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

Panel Recommendations

- Revise the curriculum on annual basis.
- Re-define the orientations (κατευθύνσεις) as discussed in Principle 1e.
- Introduce a process to assess the employability of the unit's graduates.
- Introduce an entity to facilitate bonding of the students with the department following their graduation, e.g., Alumni office.

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 Study Program includes mandatory core subjects, as well as optional ones. Teaching is done in a variety of ways from traditional classroom (either in big groups, e.g. the student cohort of each semester or small teams, e.g. tutorials) and laboratory based, to alternative methods, e.g. distant learning (both synchronous and asynchronous); there is also provision for practical (work based) training (Πρακτική άσκηση) and a final year project (Πτυχιακή Εργασία) both optional [B11, <https://www.phys.uth.gr/pps/>]. The lecture notes for all core subjects and most of the optional/elective ones is available online [<https://eclass.uth.gr/modules/auth/opencourses.php?fc=121>].

Accessibility for students with special needs (AMEA) is provided by a dedicated platform [<https://www.phys.uth.gr/prosvasi/>].

The students are able to contact the teaching staff directly to influence teaching and feel free to express themselves and be listened to [Student meeting 27/9/22, OMEA minutes, e.g. 23/03/20].

The student guide [B11] describes the assessment criteria and methods and is available to the students upon registration but also online [<https://www.phys.uth.gr/odigos-spoudon>].

Student satisfaction surveys are conducted by means of online questionnaires [B16], which the student is called to fill upon completion of each course lectures, i.e. at the end of the semester [A02]. The results of the analysis of the surveys are discussed by OMEA [OMEA meeting minutes] with corresponding recommendations made to the unit [A03]. A limit has been *a priori* set to trigger a restorative action for any subject that receives a score of lower than 3 (Nb: 5 is the top mark) in the surveys [MODIP, OMEA meeting minutes, A03].

The Student Advisor roles & responsibilities are described in the Study Guide [B11] and on-line [https://www.phys.uth.gr/symvoulos_spoudon/]. Each student is assigned an advisor. Each Advisor is allocated approximately the same number of students, but not all faculty staff appear to contribute as Advisors.

[https://www.phys.uth.gr/wp-content/uploads/2021/01/simvouloi_spoudon_2021.pdf].

The formal complaint procedure is described in [B17] and is accessible on line https://www.phys.uth.gr/kanonismos_para_\non_foittion/ as is the relevant form [https://www.phys.uth.gr/wp-content/uploads/2021/12/13-ENTY_\non-ΥΠΟΒΟΛΗ_\non-ΠΑΡΑΠΟΝΩΝ.pdf]. The panel has not received data regarding the number of complaints submitted [OMAE 26/09/2022].

II. Analysis

The unit has adopted a student-centered approach in its teaching that utilizes flexible learning paths and a variety of delivery modes, including provision for students with special needs. The students appear to be active partners in the learning process and said they feel so. Assessment criteria and methods are published in advance. The effectiveness of the teaching is measured by student satisfaction surveys conducted regularly, analysed appropriately, resulting in restorative actions as necessary to improve teaching quality. The Student Advisor is an established and functioning service. A complaint procedure is in place, but without any evidence regarding the effectiveness of its function. The students reported they feel respected, free to raise their opinions and valued.

III. Conclusions

The unit delivers a study programme in a student-centered approach that nonetheless could be improved further.

Panel Judgement

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

Panel Recommendations

- The panel expects the department to encourage the teaching staff to implement interactive teaching methods and increase the focus given on the students' interests. Alternative methods of student assessment, rather than one final examination worth 100% of the grade, should be adopted in all courses. Such changes should be reflected in the Course Outline and the Student Guide (Οδηγός Σπουδών).
- The Teaching staff should produce notes completing the list of textbooks suggested in support of lectures and laboratory practical training.
- All teaching material should be made available online (e-class), i.e., including optional courses.
- The teaching material should also become available in English.
- All faculty members should contribute as Student Advisors.
- The complaint procedure should be added to the Study Guide.
- The Department should improve the monitoring of its processes by developing a system to collect data for the operation of the: a) Student advisor (e.g. number of meetings/student/year), b) Student Complaints (number, process time, ratio of open/closed etc.) and establishing Key Performance Indicators to benchmark against.

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 unit organizes a welcoming event for new students at the beginning of the academic year [A09] together with information related to new students on its web site [<https://www.uth.gr/news/eggrafes-ptoetou-2022>].

Student support services are established re health & well-being, accommodation and sustenance [<https://www.uth.gr/zoi/foititiki-merimna>], library, IT support [<https://it.uth.gr/>] mentoring (Student Advisor), as well as policies and procedures for bullying and harassment, accessibility, psychological support and complaints with information available on the unit's web site and the Study Guide [B11]. There are no university provided accommodation for the unit's students on the university campus, the town of Lamia or the local area. Plans are underway for the construction of student accommodation by the university on the Lamia campus [Vice-rector meeting 26/9]. Students appear to receive the accommodation support stipend and sustenance grant according to the guidelines [A10, Student representatives meeting]. The accommodation stipend is ca 1000 Euros p.a. with the average price for rent in Lamia reported at ca. 250 Euros per month.

The progress of students is assessed three (3) times per year, at the end of each semester with a reseat exam in September [B11]. The results are available on line and on the student's own account [OMAE meeting 26/9]. A grade above or equal to 5 (out of 10) is deemed a "Pass" allowing the student's progression. If the student fails to pass following 3 examinations on a course, his/her progression is decided by a special meeting of a 3-member committee of the unit's staff. The students are examined on the core subjects, mandatory for all, as well as the elective ones, as described on the Student Guide [B11]. Some courses utilise alternative assessment modes («προοδοι») that also contribute to the final grade, but no formal information exists [B11].

Guidelines and information exist regarding student mobility [B11, Κανονισμος Κινητικοτητας Φοιτητων, γραφειο Κινητικότητας, <http://erasmus.uth.gr/gr/>]. MoUs for student exchange under the ERASMUS+ program have been signed with seven (7) institutions in other countries, with approval granted for two (2) of the unit's students to visit universities abroad (Vysoke Uceni Technicke v Brne, Brno, Czech Republic). The unit is able to provide teaching in English with lecture notes in English under development.

ECTS marks are given for all courses taught at the unit, 30 in total for each semester, 60 per year and 240 for the degree [B11]. A Diploma Supplement is issued automatically upon graduation with the student's degree (Πτυχίο) [B22].

The process and quality requirements for the thesis, which is an optional course, are available [B11, https://www.phys.uth.gr/kanonismos_ptyxiakis/, https://www.phys.uth.gr/wp-content/uploads/2022/03/kanonismos_ptyxiakis_ergasias.pdf]. The unit has proposed 25 thesis subjects for the 2022/23 student cohort [A11].

The unit allows for practical work-based training (Πρακτική άσκηση) with a 3-month duration and 15 ECTS equivalence, which do not contribute to the final grade [B11]. The unit is in discussions with interested parties, e.g. national scientific institutes (ΕΚΕΦΕ Δημόκριτος, Εθνικό Αστεροσκοπείο Αθηνών), businesses from the private sector to develop a supporting network [A12]. Private business participating in the work-based training are vetted by the national system ATLAS [A12]. As the unit has never had students enrolling in the work-based training program before, there are no data regarding the student experience. However, student representatives reported positively on the program with some interest of those present and eligible, i.e. in the 4th year of their studies, planning to apply [student rep meeting, 27/9].

II. Analysis

The number of proposed thesis topics (25) is below the number of students in 2022/23 who would be eligible and therefore may not be adequate to support the number of students who will choose a thesis. This was noted and discussed with the Unit's representatives with assurances given to the committee that additional subjects will be provided as necessary to meet the demand [Unit staff representatives meeting, 27/9/2022].

The accommodation stipend appears to be below the annual costs a student will incur for renting a property in Lamia.

The alternative examination methods are not formally acknowledged and described.

The Practical exam supportive network needs further development and expansion.

III. Conclusions

The unit has implemented satisfactory policies, systems and processes for the smooth transition of new students, the student needs, health and wellbeing. The students' progression is closely monitored with supporting mechanism to augment their learning (Student Tutor). The student mobility arrangements should be developed further in order to reciprocate the welcoming of non-Greek speaking students from other countries. The unit is encouraged to continue its brave steps to link with the loco-regional economy and create a supportive network, as well as further promoting an outward looking character, proactively forming new partnerships and collaborations.

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	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- The Study Guide (Οδηγός Σπουδών) to be updated with information for all methods of teaching and assessment, e.g. including “πρόοδοι”, and their contribution to the course’s final mark.
- Lectures notes and related course material to be provided also in English.
- Detailed description of the alternative assessment methods, e.g. “πρόοδοι”, should be added in the student guide, including their specific contribution to the final grade.
- Support and encourage the construction of student halls of residence (φοιτητικές εστίες) in Lamia.
- Contact local or regional businesses, e.g. Σύλλογο Βιομηχάνων Θεσσαλίας, to expand the supporting network for work-based training (Πρακτική άσκηση).
- The unit needs developing and implementing mechanisms that will allow to monitor the safety of the students while in work-based training.

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 ratio students/staff quoted by the unit is 12.54 [Quality indicators 2021-22]. The teaching staff consists of 13 faculty members, 12 instructors, and 4 technical staff (ETEP) for the laboratories. The faculty members joined the department from prior positions in the local TEI or the University of Thessaly, except for two new faculty that were hired since the formation of the department. The panel was not given information on the process that was followed in hiring the two new faculty except that the selection was carried out according to the relevant legislation, all appropriate procedures were followed based on meritocracy and full transparency, and the most qualified candidates were selected.

According to the strategic plan of the department for the next four years, four new faculty positions have been requested in the following areas of specialization:

- Theoretical low-energy nuclear physics
- Theoretical physics
- Synthesis and fabrication of modern technological materials
- Electronic telecommunications

The selection of the instructors and technical staff is also carried out according to the pertinent legislation and open job postings. Teaching experience, research experience and publications are taken into consideration. A faculty committee makes the selection and is approved by the faculty assembly.

The department aims to further the professional development of the teaching staff by offering them opportunities to participate in scientific conferences, inter-university exchanges and collaborations, as provided by pertinent legislation, but no specific actions are described that aim to increase such activities. Such activities by the teaching staff are monitored and constitute a measure of the staff quality.

The teaching load for faculty is 8 hours plus additional teaching in the post-graduate program, while instructors teach 6-12 hours weekly.

The department “encourages” a list of activities, e.g.,

- Connection of teaching to research objectives and activities
- The use of innovative teaching methods and the use of cutting-edge technologies by providing funding
- Increase of research activity and research quality

The department applies a detailed methodology of monitoring the quality of teaching, self-evaluation, student evaluations, and continuing education. The department also pursues available mobility programs for the teaching staff.

The department is studying possible approaches to attract visiting researchers, the establishment of teaching and research awards, and other rewarding schemes to further research excellence, e.g., academic distinctions, and ways to promote the pursuit of patents by the research faculty.

The panel was impressed by the presentation of the statutory student organization, which has successfully organized a physics event and sent a delegation to a conference abroad.

The administration staff is offered opportunities for continuing education. The department pursues to achieve equity and inclusivity, avoiding discrimination, and offers motives to improve performance. The administrative personnel expressed directly their satisfaction with the policies and working environment, with the sole exception that the department is understaffed, and the staff is overworked.

II. Analysis

The teaching of the current curriculum appears to be performed in a satisfactory manner up to the third year of studies. The use of 12 supernumerary instructors to assist the faculty in carrying out the teaching program suggests that additional faculty need to be hired. The current ratio of students/active faculty members is $306/11=27.8$ (2 faculty have retired). The fourth-year teaching requirements, which are tested for the first time this year, are likely to strain the capabilities of the current teaching personnel to carry out all the requirements of the program of studies that they developed.

Student evaluations are carried out systematically, but participation is not satisfactory. This issue is discussed further in Principle 2. The main complaint that the panel heard from students is that the generic questionnaire is not very suitable for physics. The panel concurs. An example of a suitable question for physics students might be “Does the instructor link the course topics to research objectives?”

The panel assesses that the research activity in the department is very limited as the majority of the faculty are not research active. The teaching load is not believed to be the main factor for this inactivity. If we define “research-active” to be professors who have published more than zero or one paper per year in recent years, we find that only four faculty are currently research-active. Two of the faculty collaborate. The non-research-active faculty may be good teachers, but the students do not have the opportunities to hear from active researchers who bring a different perspective to the classroom and to experience direct connections between teaching and research. Such faculty are generally insufficiently qualified to supervise diploma theses or to design and participate in orientations (κατευθύνσεις) that cover frontier areas of physics applications in the rapidly evolving technological innovations. Thus, the department is in a very difficult position to achieve its objectives of excellence in research, engagement in interuniversity connections, and preparation of its graduates to face the needs of an evolving marketplace.

The department has not adopted a coherent and targeted research strategy focusing on specific scientific areas. The long document B1 on various occasions mentions a wide range of physics areas, from elementary particles and nuclear physics, gravitational waves to several areas of condensed-matter and materials physics, physics of fluids, electronics, etc. etc. (11 physics areas are listed on p. 5 of the document B1). Given that the department may be able to hire only four new faculty in the next four years, it is critical to adopt a strategy and target the projected four new hires to achieve synergy in desired orientations (see recommendations).

The limited research activity has impacted the design of the four orientations (κατευθύνσεις) that are available to fourth-year students. The current orientations are based on conventional physics sub-disciplines, and they are largely suitable for students aiming research careers, with few choices for the larger number of students who would be more interested in gaining backgrounds that are suitable for employment, which is a strategic objective of the department (see also principle 1(e)).

Conclusions

The number of faculty in the department is not adequate to meet the teaching needs, especially now that a fourth year is kicking in. The faculty monitor teaching quality and take steps to fix problems.

The total research activity in the department is currently limited, reflecting the limited research funding and impacts many of the strategic objectives of the department and the many objectives that the department “encourages” or examines for implementation as outlined in the panel’s findings above. It is clear that the research component of the department needs to be strengthened substantially through new hires with qualifications that are carefully chosen to develop strength in carefully selected areas that would also impact the curriculum, connecting teaching with research, and developing “orientations” that target interdisciplinary applications of physics and prepare the bulk of students to face the marketplace not only as workers, but also as innovators and entrepreneurs.

Panel Judgement

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

Panel Recommendations

- The hiring of new faculty will be extremely important for the future development of the department. New faculty need to be hired expeditiously to lower the student/faculty ratio.
- We recommend a revision of the four choices listed in the findings (see also principle 1(g)). At this point of its evolution, the department's needs would be better served by faculty who would complement the synthesis and fabrication of modern technological materials, e.g., in nanotechnology, electronics, telecommunications, and the emerging field at the interface between electronics and biology. Special efforts should be made to identify potential candidates in Europe and the U.S. and encourage them to apply when positions are announced.
- The student evaluation program needs to be strengthened by seeking input from students to design a better questionnaire and by finding ways to increase student participation.
- The definition of the several "orientations" need to be revisited to target student needs. See Principle 1(e) recommendations.
- Significant efforts need to be made to identify opportunities for employment-related summer internships throughout Greece especially in the medical profession, including hospitals, industries that may use computer modeling to design products, law firms that may specialize in patents, telecommunications firms (see Principle 1(e)). Funds need to be secured to assist with living expenses away from home.

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-centered learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organized 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 academic unit has the necessary facilities to ensure an appropriate teaching and learning environment for the new undergraduate programme. More specifically, the existing facilities include three lecture rooms, used exclusively by the Physics Department; two amphitheatres, shared among three Departments of the School of Sciences; three laboratories dedicated to undergraduate courses; six research laboratories; and one computer room, shared with the Mathematics Department.

Other facilities available on-campus in Lamia include a library with adequate room for reading and studying; a cafeteria and a restaurant; adequate sporting facilities, namely one field and one swimming pool; and a first-aid medical centre, staffed with nursing personnel. The Panel had the opportunity to observe most -but not all- of the above-mentioned facilities by means

of a short video prepared by the Department. The Panel was informed that the two amphitheatres used by the Department do not meet accessibility standards for students with disabilities and/or special educational needs (ΦμΕΑ).

The Department has filed detailed requests with the Institution regarding building new facilities, as well as obtaining new laboratory equipment. Representatives of the Department underlined the importance of these objectives to the Panel, highlighting for example the need for renovated toilet facilities. In addition, there are currently no accommodation facilities for students in Lamia, although the Panel was assured by the Vice-Rector of the Institution that a plan for building dormitories is underway and is expected to be completed by 2025.

The Department provides a variety of electronic services to all students, including an institutional account and a webmail service. Recommended textbooks can be obtained through the “Eudoxus” online platform, while courses material and updates are easily accessible by all enrolled students through the asynchronous e-Class platform. Finally, available support services include a student counselling service; a student welfare office; an Entrepreneurship and Innovation Unit (MOKE); and an international relations office, concerning student mobility via the Erasmus program.

There are currently three experienced administrative staff members serving at the Department. They informed the Panel about various opportunities for continuous training that are available to them, however they highlighted the necessity of hiring additional administrative personnel, in order to reduce their workload.

II. Analysis

It is evident that, as the Department continues to grow in the coming years, the need for additional infrastructure will arise. However, as of now the existing resources seem to be distributed rationally (for example, the three undergraduate laboratories are used effectively to host the five compulsory laboratory courses of the curriculum).

Information about all facilities and services is efficiently communicated to all students, through the Study Guide and the Department website, and is additionally presented during the welcoming ceremony for first-year students. Finally, all teaching and administrative staff members that the Panel met with stated their willingness to accommodate students’ needs on a flexible schedule.

III. Conclusions

Even though the infrastructure of the Lamia campus is still lacking in a few major areas, such as student dormitories, the Physics Department currently has adequate resources to ensure an appropriate learning environment. It is, therefore, substantially compliant with Principle 7 of this Review.

Panel Judgement

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

Panel Recommendations

- In the long term, it is evident that the Department needs sufficient funding to renovate and expand its facilities, obtain necessary laboratory equipment, and increase the number of administrative staff. Accessibility to students with disabilities and/or special educational needs (ΦμεΑ) should be considered as a top priority in the design of new buildings.
- In the short term, the Institution and the Department should strengthen their efforts in:
 - a. Offering the necessary information and guidance, for example aiding students in securing the housing benefit (στεγαστικό επίδομα).
 - b. Accommodating students with disabilities and/or special educational needs (ΦμεΑ), as well as part-time or employed students.
 - c. Improving the IT infrastructure available to students, both in the Department and in the library.
 - d. Continuing collaborations with research institutes and other Departments to the benefit of undergraduate courses, graduate courses and research projects that require advanced laboratory equipment.
- Efforts should be made for all electronic services of the Department, including the Study Guide and the course-related documents and updates that are posted on e-Class, to be presented in English in addition to Greek.
- Efforts should be made for more recommended textbooks to be available in digital form, for example through the “Kallipos” repository platform.

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 unit has implemented procedures and tools [B1] for the frequent updating of key indicators about student progression [08. Ιστογράμματα Βαθμολογιών Φοιτητών ανά μάθημα] and the student body, which are collected by MODIP and disseminated to the unit [B24, T. Karakasidis email 30/09 and Απαντησι-ενότητα 8], teaching methods [ΠΑΘΕΣ ΠΠΣ Φυσικής].

The collection and administration system of quality data has been found consistent with the standards of the National Information System for Quality Assurance (NISQA). Moreover, the OMEA pays constant attention to these statistical data, which is attested by the material given to the ΕΕΑΡ. Therefrom, it is apparent that some figures have exceeded target values whereas others are close to them. In other cases, efforts discussions triggered on initiatives of OMEA and MODIP aim at deploying corrective actions ([A02, A03, OMEA minutes]).

It should be noted that no data exist for the employability and of the unit's graduates, as there are no students who have graduated yet.

Student satisfaction surveys are completed every 6 months [B1, A02]. The survey data are automatically collected, analysed and the results contributing to the Unit's KPIs are used by the internal audits (OMEA) [A02, A03, OMEA minutes].

II. Analysis

The unit has IT support centrally provided by the University [B1, <https://it.uth.gr/>] which appears to provide data intelligence [B24]. No information has been provided about the specific systems used for that end.

No comprehensive data exist for the analysis and evaluation of data that relate to the unit's availability and accessibility of resources, due to the unit's rather short time in operation, making it still in the setting up phase for some of its systems [OMAE/MODIP 28/9].

III. Conclusions

Evidence provided by the material made available to EEAP by the unit indicates that tools and procedures used to collect and interpret statistical data is mainly conformal to the NIQSA standards targeting the Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes. Needed improvements are evaluated by the panel as of minor importance thus justifying the opinion that the unit is fully compliant with this principle.

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 school should set up the process to follow the career paths of its future graduates, to the extent possible.

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

EEAP findings confirm the available online Public Information about the New UGP [<https://www.phys.uth.gr/>].

II. Analysis

The Department website includes the required segment devoted to the new UGP presented in Greek and English languages. The pages appear to be updated regularly though no update information is offered online. Student-directed private pages are implemented and regularly updated with the agenda of courses, shortlists of lecture themes and other useful material. The panel has remarked that the content of the material found in the student pages is offered only in Greek, which somehow contradicts the claim that the unit has dimensioned all the teaching activities such as to facilitate the integration of foreign students with little or none knowledge of Greek.

Conclusions

The unit has paid considerable attention to present teaching and research activities publicly and to provide the students with e-classes and various other tools as well. The above remarks are of minor importance and therefore the panel considers that the unit is **fully compliant** with principle 9.



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



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Panel Judgement

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

Panel Recommendations

- Information about the date of the last update of public and private web pages should be included.
- Pages of the private student accounts should offer the choice between Greek and English languages.
- Collect anonymous usage data that help improving web pages and inform the OMEA about the interest of the public and of other internal to the Department users in to the provided information. Usage data collected per page are indeed crucial for the necessary evolution (pages elimination/addition) that is necessary for keeping alive the website.
- Maps showing the Unit's buildings location within the university campus and the campus location within the city to be added to the unit's web site.

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 university has implemented a Quality Management System (QMS) and adopted the ISO9001:2015 standard. The unit is being internally accessed by MODIP [B15, B25]. No data have been provided about the scheduling of internal audits and their regularity. The internal audit findings are disseminated to the unit, including recommendations [B15]. No evidence has been provided that these have resulted in actions plans by the unit.

The department has implemented and employs the procedures for self-assessment that have been adopted by the university's MODIP unit. The self-assessment occurs annually in three areas.

- Evaluations of the teaching staff by the students
- Evaluations of the courses and laboratories by the students
- Evaluations of the teaching materials by the teaching staff.

The questionnaires are generic in nature and are provided by EΘAAE.

The quality of the educational and research activities is evaluated using both qualitative and quantitative measures with targets. The findings are tabulated and made available to MODIP.

A Curriculum Committee examines the course contents every April for the purpose of implementing changes “to align the courses with current educational needs and the directions of the international scientific research”. The Committee receives suggestions from both students and teachers for the introduction of new courses or changes in existing courses. All considered options and suggestions are formalized by the Committee and debated by the faculty assembly. If approved, they go to MODIP and the office of academic affairs (διεύθυνση ακαδημαϊκών θεμάτων) under the vice-rector. The final step is the university senate. The panel was not provided with any examples.

A faculty assembly reviews annually the teaching effectiveness and all other curriculum-related activities. A report is prepared by OMEA (which has a student representative), the faculty assembly approves and the report is sent to MODIP and is communicated to the students. The panel was not provided with an example.

Actions taken by the departments follow MODIP guidelines, but it appears that no record is kept of documented and communicated action plans.

II. Analysis

It is not clear how extensive the annual curriculum changes are, especially since virtually all courses are traditional courses on fundamental core aspects of a typical undergraduate curriculum.

The quality assurance appears to be focused solely on **the delivery of the adopted curriculum**. Exhaustive data are collected and tabulated. **The objectives of the curriculum** are discussed at length in B1 in ways that are often contradictory, sometimes stated narrowly, and other times as very wide ranging. For example, it is not clear in B1 if the educational programs aim to prepare students to face the Greek market or just as equally the European and international markets. There seem to be no clearly stated objectives and no evaluations of such stated objectives. This lack of stated objectives is reflected somewhat in the choices of courses being required by all students, e.g., plasma physics and fluid mechanics (the latter is the only regular course taught in the fourth year).

In the case of the orientations (κατευθύνσεις), B1 states that there will be annual evaluations and revisions as appropriate, but there are no clearly stated objectives that can be monitored and no criteria by which to assess effectiveness. The same is true of the internships (πρακτική άσκηση).

III. Conclusions

The department has implemented processes for the monitoring and evaluating teaching and the overall delivery of the educational program. As discussed above, however, there is a clear need to codify the objectives of the curriculum so that it can be revised to meet them. The effectiveness of both the adopted curriculum and its delivery can then be monitored and evaluated with suitable criteria.

Panel Judgement

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

Panel Recommendations

- The panel recommends that a set of objectives for all three levels of educational studies be adopted and criteria and metrics be established to measure the effectiveness of both the educational programs and their delivery.
- For the undergraduate program, the panel recommends a redesign of the orientations to target definitive, clearly stated objectives for PhD-aiming and for the more numerous employment-aiming students (see Principle 1e). For the latter, a distinction needs to be made as to whether the objectives relate to address the specific needs of the Greek economy or more generally the European/international markets.
- Targets and criteria for evaluation need to be adopted for the postgraduate and doctoral programs. In the case of the doctoral programs, it would be highly desirable to pursue programs in research excellence as in the past. However, a new emphasis can be placed on producing MSc and PhD recipients with multidisciplinary skills that can become innovators and entrepreneurs to benefit the Greek economy and society.

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

Since this is the very first external evaluation of the new undergraduate study program (UGP) in Physics of the University of Thessaly (UTH), findings and recommendations we refer to below are these issued by the latest evaluation of UTh, applying, where appropriate, to all the constitutive units, schools and departments. More specifically, these target the following items (Refs. Annex B25, HAHE information notice of June 2, 2022 and UTh commented reply):

- The Internal Quality Assurance System (IQAS) and the associated operational tools
- The improvement of the strategic research plans (increasing the numbers of scientific publications, of research programs, enhancement of interdisciplinary research)
- Doctoral studies
- Support of new teaching staff members
- Alumni and stakeholders

II. Analysis

The recent creation date of the UGP (2019) is one factor that has permitted satisfying several among the items listed above, at possibly less effort than could have been necessary for old and well-established departments of UTh. The EEAP is convinced that another ingredient of the successful completion of most among these objectives is the enthusiastic involvement of

the administrative and teaching staffs in spite of the low number of persons involved respectively.

Quality assurance: The University quality assurance unit (MODIP) and the internal quality assurance unit (OMEA) work together in tight connection and appear efficiently applying the recommendations of the latest external evaluation of the UTh. Moreover, findings, data, discussions and decisions are published on the web pages of the University and of the department.

Research activities: The research activities are limited, reflecting the limited research funding, as are the associated publications in highly cited scientific journals. The recent creation of the department and the arrival of several new members results in an heterogeneous distribution of scientific publications. Much the same holds for financed scientific contracts and collaborations. The EEAP believes that the situation will favourably evolve in the next four years eliminating these weaknesses thanks to the conjugated efforts of the research team. Finally, the representatives of the department have expressed their will for developing interdisciplinary research collaborations in the domains of chemistry, medicine, astrophysics and others. The EEAP considers that the successful completion of these goals is the key for embedding the department in the local and national economic tissues and encourages the department to give to this objective the highest priority.

Doctoral and postdoctoral students: The EEAP considers that doctoral and postdoctoral activities should be given more emphasis and that effort should be developed by the UTh and the department in the matters of financial support and better partition of students per researcher. Indeed, longevity and reputation of the department and UTh depend crucially on these matters.

New staff members: Support is given to new teaching staff members to facilitate their implantation in line with decisions taken by the University and the department.

Alumni: Although the UGP has not yet produced graduated students, it should be noticed that in line with the recommendation of the external evaluation of the Institution the department has invested in tools for facilitating future activities and contacts with alumni (website, offices, etc.).

Employers and social partners: the EEAP has had interesting exchanges with such partners acting in the domains of medical applications, national research institutions and of electronic circuits design. These have clearly indicated their engagement in offering to the UGP students positions for practical training in the context of the curriculum. However, none had projections of working positions possibly offered to graduated students. In this context the EEAP strongly recommends to the UGP creating an "Advisory committee" of stakeholders, employers, and social partners with aim to tighten the relations with them, discuss the educational programs and possibly trigger contractual exchanges. To this end, the UTh could help by ordering a market study establishing local and/or national needs.

III. Conclusions

The unit has adopted a proactive strategy to integrate with success the recommendations of the external evaluation of the institution (UTh) to its everyday life. Most of the 'weaknesses' appearing in the analysis section are related to the low age of the department and are likely to vanish rapidly.

Panel Judgement

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

Panel Recommendations

In view to face weaknesses appearing in the Analysis section the unit should:

- Develop interdisciplinary research collaborations in the domains of chemistry, medicine, astrophysics, and others.
- Provide financial support to doctoral and postdoctoral students.
- Equilibrate the partition of doctoral/post-doctoral students per teaching staff member.
- Under the supervision of the UTh create an advisory committee integrating stakeholders, employers, social partners.

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. **N/A**

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
- II. Analysis
- III. Conclusions

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

PART C: CONCLUSIONS

I. Features of Good Practice

- The teaching personnel members are highly qualified, providing a comprehensive education to their students.
- The core Physics undergraduate programme is of very good quality.
- The school infrastructure is in good condition and continuously improving, which positively contributes to the education of undergraduates.
- The rapport between students and faculty is excellent.
- The culture of continuous self-assessment of the unit's teaching is valuable.

II. Areas of Weakness

- Insufficient teaching and accommodation facilities.
- The existing orientations (κατευθύνσεις) do not adequately prepare the students for the evolving Greek market place.
- Employers, social partners and stakeholders are not actively participating in the undergraduate curriculum revisions.
- Course grading procedures lack homogeneity and rely heavily on one final examination.
- Course recitations and tutoring sessions are not widely implemented.
- The number of elective courses is excessive.
- Low and unequally distributed research income.

III. Recommendations for Follow-up Actions

- The academic unit should improve its strategic plan by orienting the curriculum toward interdisciplinary areas, facilitating the professional insertion of future graduates in the local and national economic tissues and enhancing differentiation from similar offers at the national level.
- The unit should incorporate input from employers, social partners and stakeholders into the programme revisions.
- The unit should unify and add flexibility to the examination methods of offered courses.
- The number of elective courses should be reduced.
- The unit should improve the supporting network for work-based training by strengthening the relations with employers and stakeholders.
- New faculty should be hired in interdisciplinary areas.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 2, 8, and 9.**

The Principles where substantial compliance has been achieved are: **3, 4, 5, 6, 7, 10, and 11.**

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

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