



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



Εθνική Αρχή
Ανώτατης Εκπαίδευσης
Hellenic Authority
for Higher Education

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

Accreditation Report for the Undergraduate Study Programme of:

Physical Sciences
Institution: Hellenic Open University
Date: 13 March 2021



Επιχειρησιακό Πρόγραμμα
Ανάπτυξη Ανθρώπινου Δυναμικού,
Εκπαίδευση και Διά Βίου Μάθηση
Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης



Report of the Panel appointed by the HAHE to undertake the review of the Undergraduate Study Programme of **Physical Sciences** of the **Hellenic Open University** for the purposes of granting accreditation

TABLE OF CONTENTS

Part A: Background and Context of the Review	4
I. The External Evaluation & Accreditation Panel	4
II. Review Procedure and Documentation.....	5
III. Study Programme Profile.....	8
Part B: Compliance with the Principles	9
Principle 1: Academic Unit Policy for Quality Assurance	9
Principle 2: Design and Approval of Programmes.....	12
Principle 3: Student- centred Learning, Teaching and Assessment	14
Principle 4: Student Admission, Progression, Recognition and Certification.....	16
Principle 5: Teaching Staff	18
Principle 6: Learning Resources and Student Support	20
Principle 7: Information Management	22
Principle 8: Public Information	24
Principle 9: On-going Monitoring and Periodic Internal Review of Programmes.....	25
Principle 10: Regular External Evaluation of Undergraduate Programmes.....	28
Part C: Conclusions	29
I. Features of Good Practice	29
II. Areas of Weakness.....	29
III. Recommendations for Follow-up Actions	29
IV. Summary & Overall Assessment.....	31

PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme of **Physical Sciences** of the **Hellenic Open University** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. Professor Panagiotis Souganidis (Chair)**
The University of Chicago, Illinois, USA
- 2. Dr. Demosthenes Kazanas**
NASA - Goddard Space Flight Centre, Greenbelt, Maryland, USA
- 3. Professor Irene Kokkala**
University of North Georgia, Dahlonega, Georgia, USA
- 4. Dr. Eng. Vassilis Pontikis**
CEA, Université Paris-Saclay, 91191- Gif-sur-Yvette, Paris, France
- 5. Professor Christos Takoudis**
University of Illinois at Chicago, Illinois, USA

II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (henceforth EEAP) conducted, during the period March 8-13, 2021, the accreditation evaluation of the Undergraduate Program (henceforth UP) of Physical Sciences (henceforth PS) of the Hellenic Open University (henceforth EAP).

Due to the Covid-19 pandemic, the EEAP could not visit the site physically and conducted the accreditation evaluation via Zoom teleconferencing.

On Monday, March 1, 2021, 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 was sent to the EEAP members in advance.

On Monday, March 8, 2021, the EEAP met to discuss the review process, allocate tasks, and identify possible issues to be addressed during the visit.

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

1. The guidelines for accreditation created by HAHE.
2. The mapping grid created by HAHE.
3. A tabulation (prepared by HAHE) of the scores of the program regarding the quality indexes for the years 2015 – 2018.
4. The accreditation information for the program prepared by the department.
5. A set of annexes to the accreditation proposal, including the study guide, course descriptions, etc.
6. Statistical data regarding the department and the specific program of studies.
7. The Quality Assurance policy of the specific program of studies.
8. A set of documents presenting quality indicators both for the school and the program.
9. The report of the 2013 external evaluation conducted by HAHE for the School of Science and Technology of EAP.
10. The results of the internal evaluations of the specific program of studies.

On Tuesday, March 9, 2021 the EEAP met the Vice Rector and President of MODIP, Prof. Efstathios Efstathopoulos, the Dean of the School of Science and Technology, Prof. Ioannis Kalavrouziotis, and the Study Program Director, Prof. Maria Hadjinikolaou, who gave a presentation about the University and its history, its Schools, physical infrastructure and policies and areas of concern as well as the academic profile, current status, and strengths of the School of as well as some areas of concern. The next meeting of the EEAP was with OMEA and MODIP representatives. In addition to Prof. Efstathopoulos and Prof. Hadjinikolaou, present were OMEA members Assistant Prof. Argyro Sgourou and Theofanis Orphanoudakis, MODIP representatives Prof. Vasilia Hatzinikita and Dimitrios Kalles and MODIP staff Ms. Eleni Panitsa, Ms. Evangelia Kaldani, Mr. Nikos Karousos and Mr. Serafeim Karaiskakis.

The EEAP also had the opportunity to review student assignments, exam papers and examination material, which were made available by the OMEA. Finally, the EEAP looked at the revisions made in the UP following the 2013 external evaluation of the Department.

The same day, the EEAP had teleconference meetings with members of the permanent (DEP) and adjunct (SEP) teaching staff as well as a group of current students of the UP. The day concluded with EEAP's debriefing.

The members of the EEAP were able to watch privately the provided videos of the classrooms, lecture halls, libraries, laboratories, and other facilities. In addition, they were granted access to the numeric educational platform. Members of the EEAP had thereby the opportunity to login the site of the distance teaching in order to assess its structure and suitability for the needs of UP. As a result, on Wednesday, March 10, 2021, instead of the planned one-hour on-line tour, the EEAP asked to meet again with representatives of the program and MODIP in order to obtain further information. Later in the same day, the EEAP had separate teleconferences meetings with a group of graduates of the program, as well as some "social partners". Members of the EEAP also had the opportunity to login the site of the distance teaching in order to assess its structure and suitability for the needs of the program.

Following a short debriefing, the EEAP met with the OMEA & MODIP representatives to clarify certain points and findings. The day concluded with a meeting with the Vice-Rector and President of MODIP, the Study Program Director, and OMEA and MODIP representatives and staff to discuss informally the key findings and recommendations.

The report of the EEAP was prepared in the period March 11-13, 2021. The final document was submitted to HAHE on Monday, March 15, 2021.

The schedule of the two-day long tele-visit was well organized albeit very dense. As a result, most of the meetings ran late. Nevertheless, the EEAP came away with a thorough picture of the University, School and Programme visions and the efforts made for the education of the undergraduate students.

The overall conclusion of the EEAP is that the quality of the UP of the PS of the EAP 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 UP, PS and EAP to develop rigorous procedures for monitoring the assurance quality, and, in general, the effectiveness of the program.

The EEAP believes that the PS and EAP in general have an important role to play in the Greek educational system. Indeed, the EAP provides an (actually the only) opportunity for a "second chance" to higher education for those who, for whatever reasons, were not able to study in a University at an earlier time. The tuition-based program attracts students who are more dedicated than a typical student in a "conventional" University. It also provides a very concrete and precise roadmap about how to successfully conclude the studies.

The tuition-based model also allows EAP to be more flexible with fellowships, faculty support for search, visitors, etc.

The EEAP was very surprised to find out that the modest yet not negligible support that the EAP was receiving from the Greek Ministry has been cancelled over the last 2 years. It is the strong recommendation of this Panel that appropriate efforts be made by EPA for this funding to be re-established.

III. Study Programme Profile

The UP was established in 2000 with the explicit task to produce graduates who combine basic level theoretical and practical skills in the areas of Physics, Chemistry and Biology.

The teaching staff of EAP consists of permanent (DEP) and adjunct for 3-year period (SEP) members. Currently there are 41 members DEP and 2644 members SEP. The University has established a very elaborate and explicit process to hire SEP members which is based on several criteria including research accomplishments and effective teaching skills. The temporary staff is reviewed annually both by the students and each program's coordinator.

The School of Physical Sciences, which is one of the first 4 of the EAP, offers 2 undergraduate and 14 graduate programs of study. It trains approximately 2200 students per year. The class of 2020-2021 has 1562 students. This represents a serious decline from previous years, which could be attributed to the current financial hardships in Greece. The split between undergraduate and graduate students is approximately 40/60. The average age of the student population is 36 years. The last graduating class had 1095 students with an average grade 7.39/10. The School employs 14 members DEP and 525 members SEP. In addition, 8 technical employees are in charge of the labs and 2 others offer administrative support. The UP under review has 4 DEP and 41 SEP members which appears to be sufficient for the needs of the program.

The last external evaluation of the UP, which took place in 2013, was part of the broader review of the EAP. Several of the recommendations of the 2013 review concerning the UP were to a large extent implemented. A partial list includes: (i) the posting on-line of lecture notes, solved examples and self-learning practice examinations, (ii) the web-casting tutor-student face-to-face meetings (TSS), (iii) the submission and return of graded material online, (iv) the setting of centrally enforced homework deadlines across modules and sections, (v) the development and establishment of new undergraduate/teaching laboratories, and (vi) the improvement of the quality of the texts used for the courses.

Some of the recommendations still need to be addressed in some form and references are made later in the report.

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Academic Unit Policy for Quality Assurance

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT ALL INSTITUTION'S AREAS OF ACTIVITY, AND PARTICULARLY AT THE FULFILMENT OF QUALITY REQUIREMENTS OF UNDERGRADUATE PROGRAMMES. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit is in line with the Institutional policy on quality, and is included in a published statement that is implemented by all stakeholders. It focuses on the achievement of special objectives related to the quality assurance of study programmes offered by the academic unit.

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

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

- a) the suitability of the structure and organization of the curriculum;*
- b) the pursuit of learning outcomes and qualifications in accordance with the European and the National Qualifications Framework for Higher Education;*
- c) the promotion of the quality and effectiveness of teaching;*
- d) the appropriateness of the qualifications of the teaching staff;*
- e) the enhancement of the quality and quantity of the research output among faculty members of the academic unit;*
- f) ways for linking teaching and research;*
- g) the level of demand for qualifications acquired by graduates, in the labour market;*
- h) the quality of support services such as the administrative services, the Library, and the student welfare office;*
- i) the conduct of an annual review and an internal audit of the quality assurance system of the undergraduate programme(s) offered, as well as the collaboration of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU).*

Study Programme Compliance

The University has established an appropriate Quality Assurance (henceforth QA) Policy which fully satisfies the relevant requirements. The Key Performance Indicators (KPIs) are regularly updated. Through the OMEA, the PS follows the guidelines of the institutional policy regarding its UP. The MODIP monitors and enforces the Quality Assurance.

The curriculum of the UP, which is revised on a regular basis in order to accommodate the level, quality and knowledge of the students, provides an adequate background to meet the educational goals of PS and international standards. The EEAP had discussions with a number of current and past students, who indicated that they are very satisfied with the program and their education.

The PS needs to develop extended relationships with national and international private employers, which could provide an important link between the education of the undergraduate and graduate students and present day industrial and societal needs and trends. The EEAP believes that this is an important aspect of the program's mission and urges the PS to make a serious effort in this direction, the success of which may require some further revisions in the UP. As things stand now the "after the degree" focus of the UP is limited (mostly teachers in high school) and this should change and diversify.

The PS and the EAP as a whole should also make efforts to expand the connection with the community and to further develop outreach activities related to the physical sciences education of students at all levels of secondary education. The EEAP strongly encourage PS and EAP to seek funds from industrial partners, and local, regional and national government to develop this a worthwhile activity.

Such activities will also increase the visibility of the UP and may, with the recruitment of younger students, be able to establish EAP as a real attractive choice for higher education in Greece.

The EAP has a very good system for reviewing and assessing the teaching activities of both the regular and adjunct faculty. The latter involves evaluation from both the students and the coordinators of the thematic units. An effort should be made to review more carefully the activities of the adjunct faculty when there is a significant discrepancy between the scores of the two evaluations.

The QA policy is in place and the MODIP within the University structure oversees its proper and regular implementation.

The research activity of the DEP is at a reasonable level. The overall reputation of the undergraduate and graduate programs of PS and EAP can be improved, if some of the funds collected from tuition are used to attract as SEP Greek scientists from abroad to teach in the programs.

To enhance the marketability of the UP degree it is important to establish the practices of undergraduate thesis ("Diplomatiki Ergasia") and Internships ("Praktiki askisi"). This need, which was pointed out in the 2013 review, has not been addressed yet successfully.

One of the concerns expressed by students is the long time (4 hours once per month) between the scheduled meetings among students and instructors. The EEAP recommends that the frequency of the TSS changes to twice per month for 2 hours each time. It is the understanding of the EEAP that in the pre-covid days these meetings were in a person. Doubling the frequency may create logistical issues, which can be addressed by having one meeting in person and one virtual.

The PS has started offering a “midterm exam” for its class. The EEAP finds this to be an important improvement and strongly recommends that it becomes standard practice.

Another possible change that may make a significant difference is to use some of the available funds to hire Teaching Assistants (TAs) who can help with questions of the students in the time between TSS. The TAs should be advanced students participating in the graduate programs.

All classes should start with an orientation session. Such an activity not only will help the students to understand the expectations of the class but will also give the opportunity to develop or further enhance social activities and interactions among the students.

The teaching staff is qualified to support the educational mission of the PS and the research productivity of the faculty is deemed to be satisfactory. The other resources of the University like computing labs, library facilities, etc., are of high quality.

One concern expressed in the discussion with current and former students of the program is that more work has to be done for securing the professional rights of the graduates. The EEAP urges the PS to make every possible effort on this direction.

The EAP and PS should intensify their effort to increase the visibility of the program so that they can attract students immediately after Lykeion. This is something that was already pointed out in the 2013 review. Such efforts include but are not limited to organizing special events (PS has already done things in this direction) but also the creation of an Alumni Society, the production of a newsletter that highlights every year the accomplishments of the faculty and the graduates, the recruitment of teaching personnel of high reputation, etc.

Panel Judgement

Principle 1: Academic Unit Policy for Quality Assurance	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- Continue the practice of curriculum revisions as demanded by the circumstances.
- Increase (double) the frequency of the TSS meetings.
- Hire graduate students to serve as teaching assistants.
- Offer an orientation session for each class.
- Establish the practices of the “Diplomatiki” and “Internships”.
- Develop extended relationships with national and international private employers.
- Ensure in any possible way the professional rights of the graduates.
- Create an Alumni Society.
- Publish an annual newsletter.
- Attract highly qualified permanent and/or adjunct faculty.

Principle 2: Design and Approval of Programmes

INSTITUTIONS SHOULD DEVELOP THEIR 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.

Academic units develop their programmes following a well-defined procedure. The academic profile 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 National Qualifications Framework for Higher Education are described at this stage. The approval or revision process for programmes includes a check of compliance with the basic requirements described in the Standards, on behalf of the Institution's Quality Assurance Unit (QAU).

Furthermore, the programme design should take into consideration the following:

- *the Institutional strategy*
- *the active participation of students*
- *the experience of external stakeholders from the labour market*
- *the smooth progression of students throughout the stages of the programme*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System*
- *the option to provide work experience to the students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the programme by the Institution*

Study Programme Compliance

The program is structured in 12 thematic units some of which are mandatory and some elective and 3 mandatory labs.

For graduation a student needs 240 ECTS which is the standard number. The minimum duration of studies is 4 years. Since most students have professional activities, the average time for graduation is considerably higher (9 years). The positive aspect of having to pay tuition is that students are motivated to graduate.

The program of study is supervised by a committee consisting of the “supervisors” of the thematic units who report to the Dean of PS. Thematic units are supervised by DEP and SEP members. Finally, each student has a faculty counsellor.

The “preparation” for the lab work is done remotely. The last two weeks of each class with labs students need to complete the experimental work in person during the summer. Although this often creates rather stressful periods, it is a necessity of the distant leaning system.

The EEAP's opinion is that the UP is organized well and meets the standards. The relevant committees should however remain vigilant to deal with any problems that may arise.

Some specific recommendations about the improvement of the UP were listed in the previous section of the report and below.

Panel Judgement

Principle 2: Design and Approval of Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Establish an Alumni Association.
- Develop a systematic mechanism for getting input from stakeholders and former graduates.

Principle 3: Student- Centred Learning, Teaching and Assessment

INSTITUTIONS SHOULD ENSURE THAT THE 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.

Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- *respects and attends to the diversity of students and their needs, 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 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.*

In addition :

- *the academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field;*
- *the assessment criteria and methods are published in advance;*
- *the assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process;*
- *student assessment is conducted by more than one examiner, where possible;*
- *the regulations for assessment take into account mitigating circumstances;*
- *assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;*
- *a formal procedure for student appeals is in place.*

Study Programme Compliance

Due to the unique form of course material delivery through distance education and the small number of students per course EAP and PS provide a student-centered education. The program of study is completed through flexible progression due to the individualized approach of each student depending on their circumstances. Students are able to progress through their studies at their own pace.

At the start of the term students receive packets with all the information needed to be successful in each course. There is an orientation that introduces the students to the institution and the program of study. The students also receive complete information of the syllabus, the plan of study (weekly schedule), and exam content for each the course. Although stated in the

provided documents, it was unclear to the EEAP whether individual students receive support by an advisor during their studies.

The delivery of the content is presented in various forms through conventional textbooks (in both electronic and physical forms) along with additional resources (primarily electronic) for review and further explanation of study materials. Various teaching modes of delivery are employed including monthly review sessions (TSS) that include PowerPoint presentations of materials in some cases, etc. The laboratory exercises are completed in a condensed two-week experience on campus during the summer. Students' expenses for travel, and room and board are covered by the institution.

It appears that there is continual review and implementation of improvement in the material included in the course and updates to the textbooks and other learning materials. The quality of teaching is evaluated by the students and the course coordinator.

The students are supported by instructors through electronic means (forum) within the LMS platform, through email, and during regular office hours posted in the course information panel. The examinations, e.g., both the midterm and final exams, are usually conducted on campus or other appropriate sites distributed through the country to facilitate students who live in locations far from the main campus. Due to the pandemic, exams have been conducted electronically and are proctored by the instructor through live video feed. There are additional graded items during the term that include various assignments.

There is a dedicated office of a student advocate (ombudsperson) that manages student complaints.

Panel Judgement

Principle 3: Student- centred Learning, Teaching and Assessment	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Break up the 4-hours review session once a month to 2-hour sessions every 2 weeks, in order to review a smaller amount of content in a reasonable amount of time.
- The material for each unit should be presented in PowerPoint (with voice over) instead of using this mode only for the review sessions.
- Use the concept of faculty/advisor to provide support to students in addition to all the services available already.
- Establish an undergraduate thesis and internships.
- Use graduate students as teaching assistants for tutoring purposes.

Principle 4: Student Admission, Progression, Recognition and Certification

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

Institutions and academic units need to put in place both processes and tools to collect, manage and act on information regarding student progression.

Procedures concerning the award and recognition of higher education degrees, the duration of studies, rules ensuring students progression, terms and conditions for student mobility should be based on the institutional study regulations. Appropriate recognition procedures rely on institutional practice for recognition of credits among various European academic departments and Institutions, in line with the principles of the Lisbon Recognition Convention.

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).

Study Programme Compliance

Students wishing to attend the UP only need to apply. Basically, every applicant is accepted. There is, however, considerable attrition after the first year.

Upon entering the program as well as at the beginning of each thematic unit the students receive by regular and electronic mail all the necessary information.

The EEAP proposes that an orientation be offered at the beginning of each unit.

The school has established very good mechanisms to assess the progress of students involving exercises, required papers and midterm exams.

The PS offers academic and need based fellowships. This is an excellent practice which should be expanded. The EEAP was informed that a new and very generous program of fellowship has been recently approved and will be implemented soon.

Students are made aware of the opportunities provided by the ERASMUS program and are encouraged to apply. So far very few of them have taken advantage of the opportunity.

The EAP should also try to attract foreign students by offering in English.

Panel Judgement

Principle 4: Student Admission, Progression, Recognition and Certification	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Improve the student orientation at the beginning of each thematic unit as indicated in previous sections.
- Continue encouraging students to take advantage of the ERASMUS mobility program despite the underlying economic expenses.
- Envisage teaching in English in order to attract foreign students.
- Develop an extensive relationship with private employers throughout Greece through advertisements.

Principle 5: Teaching Staff

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE QUALIFICATIONS AND COMPETENCE OF THE TEACHING STAFF. THEY SHOULD APPLY FAIR AND TRANSPARENT PROCESSES FOR THE RECRUITMENT AND DEVELOPMENT OF THE TEACHING STAFF.

The Institutions and their academic units have a major responsibility as to the standard of their teaching staff providing them with a supportive environment that promotes the advancement of their scientific work. In particular, 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 recognize 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.*

Study Programme Compliance

The EAP and its academic units rely on a robust scheme for the recruitment of the teaching staff members, permanent and under contract, and for the continuous assessment of their teaching and research activities. All have successfully passed the standard state procedures of recruitment of university teaching staff.

However, the EEAP has not been given evidence of mechanisms ensuring the professional development of the teaching staff nor of actions targeting the enforcement of the links between teaching and research. Similarly, no evidence was given about the existence of an integration between teaching and research.

The institution has a longstanding expertise in modern methods of distance education through the associated technologies. The EEAP is convinced that the EAP devotes considerable effort towards the renewal of teaching methodologies.

Opportunities for continuous professional development in reference to best practices in distance education exist although not attended/used systematically by many instructors.

In this direction, the EEAP recommends that PS and EAP develop links with other Open Universities around the world in order to exchange ideas about and develop better practices.

Beyond the primary target of establishing a reference for the comparison purposes, such interactions could also favour student exchanges taking advantage of the ECTS system.

The EEAP was presented with evidence that efficient quality assurance processes, based on statistical data, are used within the academic units in order to trigger necessary corrective actions when needed.

The Panel observed that the twofold evaluation of the teaching staff and of the educational material by the students and program coordinators display significant differences. Indeed, the latter systematically give favourable evaluations whereas even in cases where students rate negatively some educational units. The same trend is observed with the evaluation of the educational materials, which remarkably correlate with the evaluation of the teaching staff.

The EEAP recommends that PS and EAP look at these two issues and act without any delay.

The EAP uses the appropriate policy for publicly advertising about employment offers and for attracting highly qualified academic staff.

Another observation is that there is not much turnover of the membership of SEP. Indeed, most of the SEP members have been reappointed multiple times. The EEAP recommends that a strategy is developed towards attracting new blood and wider variety of teaching staff including Greek scientists from abroad.

The permanent staff (DEP) should increase their efforts to obtain outside funding.

In this direction, the EEAP wishes to comment EAP for the recent decision to provide substantial research support to the DEP.

One concern of the EEAP, which was actually pointed out also in the 2013 review, is the lack of a strategic plan for both the research and educational objectives of PS and EAP at large. This needs to be addressed if EAP is to become a first-rate university nationally and internationally.

Panel Judgement

Principle 5: Teaching Staff	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- Develop strong interactions with other open universities around the world.
- Develop procedures for more substantial renewal of the SEP faculty.
- Develop strategies to attract SEP staff from the pool of Greek scientists who live abroad.
- Increase efforts to obtain outside research support.

Principle 6: Learning Resources and Student Support

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER 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 funding and means to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means could include facilities such as libraries, study rooms, educational and scientific equipment, information and communications services, support or 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 or international students, students with disabilities) and the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance ensures that all resources are appropriate, adequate, and accessible, and that students are informed about the services available to them.

In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.

Study Programme Compliance

The addition of the new building has provided new space for well-equipped laboratories and a large auditorium. The emphasis for the unique nature of the institution centered on distance learning is based on a very strong infrastructure for electronic delivery of courses and services.

There are several offices focusing on technology enhancements, course design, strategic planning, quality assurance, etc. supporting the educational programs. The maintenance of the instructional platform and the content presented with all the supplemental resources is significant in nature. An effort should be made to consolidate the form of presentation with the platform to allow for easier viewing of the learning components, instead of having to use a different application or download files in order to view them. The content viewer should be used to display the content for easier access.

The library has physical holdings on-site, but the most important component is the digital library and its subscriptions and electronic content available to students for study.

There is evidence that students with special needs are adequately supported. However, the EAP and PS should consider the expansion of such services beyond the current level.

Panel Judgement

Principle 6: Learning Resources and Student Support	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Increase the library holdings (or greater access to resources) maintaining a balance for all areas of study focus.
- Support and provide access to learning materials for individuals with special needs by offering facilities going even beyond the requirements of the Greek Law.

Principle 7: Information Management

INSTITUTIONS 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.

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

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

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

- *key performance indicators*
- *student population profile*
- *student progression, success and drop-out rates*
- *student satisfaction with their programme(s)*
- *availability of learning resources and student support*
- *career paths of graduates*

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

Study Programme Compliance

The website of MODIP contains among others the reports of yearly internal assessments. These are rather extensive reports and provide an analysis of a host of issues related to the function of the school, its future goals and the relation of the school with the local community along with certain self-criticism. In addition, these reports include extensive and detailed statistics of the entire school and their breakdown along the different programs and individual courses undergraduate and graduate. These provide a valuable view on the overall workings of the school.

Panel Judgement

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

Panel Recommendations

- Explore ways to increase the response rates of students to teaching evaluations.
- Establish an Alumni Association and utilize it to collect information about the employment and carrier paths of former students.

Principle 8: Public Information

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES WHICH IS CLEAR, ACCURATE, OBJECTIVE, UP-TO-DATE AND READILY ACCESSIBLE.

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

Therefore, institutions and their academic units provide information about their activities, including the programmes they offer, the intended learning outcomes, the qualifications awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students, as well as graduate employment information.

Study Programme Compliance

The website of EAP is well-structured and provides in depth information about the EAP's administration, its different schools and, as far as PS is concerned, its program of studies, courses, personnel and many other educational and administrative information. The website also includes a link to a web-radio station, which could be employed to promote the school news and accomplishments.

There is, however, only a Greek version. It is important that the PS creates a website in English for the benefit of the non-Greek speaking readers. All information about the studies should be accessible there.

An issue that needs immediate attention is the fact that the search engine of the site is deficient. For example, it does not provide access to the school as well as the personal pages of the faculty members.

Panel Judgement

Principle 8: Public Information	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- Post an English version of the website with all information relevant to the PS.
- Improve the search engine to provide access to the websites of the PS and faculty.
- Include an alumni link, where EAP and PS as well as prospective and incoming students will be able to trace and follow the careers of its graduates and be able to contact them for information and advice.

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes

INSTITUTIONS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR 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 study programmes aim to maintain the level of educational provision and to create 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. Revised programme specifications are published.

Study Programme Compliance

The PS has established an Internal Evaluation Committee (OMEA) composed of DEP/SEP members and MODIP staff. Its function is to collect, analyse and present on an annual basis all data relating with the undergraduate program.

In addition, the PS has also created an Undergraduate Curriculum Committee (ΕΠΣ) that oversees the undergraduate program, ensures its smooth operation and makes recommendations for improvements. Such recommendations include updates/revisions of the curriculum taking into account revisions of relevant European universities and the latest developments in physical sciences. Revisions also address issues related to student needs and expectations and social changes.

The undergraduate program is evaluated on an annual basis both by OMEA and the Undergraduate Curriculum Committee in order to improve its overall operation and achieve the stated goals.

Panel Judgement

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

Continue these very good practices.

Principle 10: Regular External Evaluation of Undergraduate Programmes

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

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HAHE grants accreditation of programmes, 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 template's requirements, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees.

Both academic units and institutions participate in the regular external quality assurance process, while respecting the requirements of the legislative framework in which they operate.

The quality assurance, in this case the accreditation, is an on-going process that does not end with the external feedback, or report or its follow-up process within the Institution. Therefore, Institutions and their academic units ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.

Study Programme Compliance

The EEAP finds that the current accreditation appears to be in compliance with Greek law and has benefited from the effective interaction among various agencies and committees including OMEA, MODIP and HAHE.

The OMEA of PS has a continuous and positive collaboration with MODIP. All staff members have contributed to the review processes and evidence was provided that they appreciate the importance of both the professional accreditation and HAHE's peer review. All members of HAHE, MODIP and OMEA should be praised for their diligent and synchronized efforts that greatly facilitated the work of the EEAP members.

The EEAP discussed and drew evidence about the UP from representatives of all stakeholders (students, faculty, alumni and employers).

The recommendations of the 2013 evaluation of the program were partially implemented (as indicated throughout the present report) within the constraints of PS and EAP.

Given that the EAP and PS are evaluated periodically by HAHE, the EEAP recommends that the former use this opportunity to come up with their own long-term plan about the further development of the University and the program.

Panel Judgement

Principle 10: Regular External Evaluation of Undergraduate Programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

- Continue the current processes of evaluation and accreditation.
- Develop a long term (5 to 10 years) plan for the future further development of the University and the program.

PART C: CONCLUSIONS

I. Features of Good Practice

The EEAP is of the opinion that the following points are well addressed by EAP, PS and UP:

- The faculty is very dedicated to its mission.
- A number of the revisions of the curriculum undertaken based on the 2013 evaluation are appropriate given the composition of the student body and the delivery mode employed.
- The new building and labs are appropriately equipped to serve the educational and research needs of faculty and students.
- Optimal student to faculty ratio.

II. Areas of Weakness

In the view of the EEAP, the following items require attention and improvement.

- More frequent meetings between instructors with students.
- The lack of teaching assistants.
- Intensive labs for up to 3 courses in two weeks.
- No Alumni Association.
- Limited relations with employers and social stakeholders
- Limited integration of teaching and research.

III. Recommendations for Follow-up Actions

- Make all necessary efforts to succeed re-establishing the modest but not negligible support from the state.
- Increase the number of merit and need based Fellowships.
- Provide research support to the DEP.
- Establish the practices of Undergraduate Thesis and Practical training.
- Increase efforts to obtain outside funding.
- Take better advantage of the ERASMUS program and continue encouraging students to take advantage of it despite the underlying financial expenses.
- Create and maintain an Alumni Society and utilize it to collect information about the employment and carrier paths of former students.
- Publish an annual newsletter.
- Continue the practice of curriculum revisions as demanded by the circumstances.
- Increase (double) the frequency of the TSS meetings.
- Hire graduate students to serve as teaching assistants.
- Develop extended relationships with national and international private employers.
- Insure in any possible way the professional rights of the graduates.
- Attract highly qualified permanent and/or adjunct faculty.
- Develop a systematic mechanism for getting input from stakeholders and former graduates.

- The material for each unit should be presented in PowerPoint (with voice over) instead of using this mode only for the review sessions.
- Use the concept of faculty/advisor to provide support to students in addition to all the services available already.
- Explore ways to increase student response rates for teaching evaluations.
- Post an English version of the website with all information relevant to the PS
- Improve the search engine to provide access to the websites of the PS and faculty.
- Include an alumni link, where EAP and PS as well as prospective and incoming students will be able to trace and follow the careers of its graduates and be able to contact them for information and advice.
- Continue the current processes of evaluation and accreditation.
- Develop a long term (5 to 10 years) plan for the future development of the University and the program.
- Increase the library holdings (or greater access to resources) maintaining a balance for all areas of study focus.
- Support and provide access to learning materials for individuals with special needs by offering facilities going even beyond the requirements of the Greek Law.
- Improve the orientation of students at the beginning of each thematic unit as indicated in previous sections.
- Develop an extensive relationship with private employers.
- Develop strong interactions with other open universities around the world.
- Develop procedures for more substantial renewal of the SEP faculty.
- Develop strategies to attract SEP staff from the pool of Greek scientists who live abroad.
- Envisage teaching in English in order to attract foreign students.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **2, 3, 4, 6, 7, 9.**

The Principles where substantial compliance has been achieved are: **1, 5, 8, 10.**

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

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

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

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

- 1. Professor Panagiotis Souganidis (Chair)**
The University of Chicago, Illinois, USA
- 2. Dr. Demosthenes Kazanas**
NASA - Goddard Space Flight Centre, Greenbelt, Maryland, USA
- 3. Professor Irene Kokkala**
University of North Georgia, Dahlonega, Georgia, USA
- 4. Dr. Eng. Vassilis Pontikis**
CEA, Université Paris-Saclay, 91191- Gif-sur-Yvette, Paris, France
- 5. Professor Christos Takoudis**
University of Illinois at Chicago, Illinois, USA